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Part-I

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Mock 01

SBI PO Prelims 2019

REASONING ABILITY

Direction (1-5): Study the following information carefully and answer the questions given below:
Six boxes i.e. A, B, C, D, E and F of different colors i.e. Orange, Red, Black, Yellow, Pink and White are placed one above another but not necessarily in same order. Box C is placed just above the orange colored box. One box is placed between A and orange colored box. Three boxes are placed between A and pink colored box. Two boxes are placed between D and E. Red colored box is placed just below A. There are as many boxes placed above red colored box as below E. E is not Orange colored box. Black colored box is placed just above yellow colored box. F is placed above B.

1. How many boxes are placed above F?
(a) Two (b) Three (c) Four
(d) One (e) None of these

2. In which of the following position red colored box is placed?
(a) 2nd from bottom
(b) 1st from bottom
(c) 2nd from top
(d) 1st from top
(e) None of these

3. Which of the following box is Yellow colored?
(a) A (b) C (c) E
(d) D (e) None of these

4. Which of the following color is box F has?
(a) Orange (b) Pink (c) Red
(d) Yellow (e) None of these

5. Four of the following five are alike in certain way based from a group, find the one which does not belong to that group?
(a) F-Yellow (b) E-Orange (c) B-Black
(d) C-Red (e) D-White

6. In some of the following logic TABLE is coded as BUEFM and PRAYS is coded as SQDTZ, following the same logic MINOR will be coded as
(a) JNQSP (b) JPNSQ (c) PNSJQ
(d) PSNQJ (e) None of the above

7. How many pairs of letters are there in the word 'PERSUADE', each of which have as many letters between then in the word as they have between then in the English alphabet?
(a) one (b) two (c) three
(d) four (e) five

Direction (8-10): Point R is 5m west of point Q. Point P is 16m north of point Q. Point R is 25m south of point T. Point T is 10m west of point V. Point V is 9 m north of Point J.

8. Point J is at how much distance and in which direction with respect to point P?
(a) 10m, South-east
(b) 5m, South
(c) 5m, East
(d) 10, North-west
(e) 5m, West

9. If point W is west of point J and north of point R, then what is the distance between T and W?
(a) 15m (b) 9m (c) 12m
(d) 10m (e) 5m

10. What is the direction of Point V with respect to Point R?
(a) north (b) south-west (c) north-east
(d) south (e) north-west

Direction (11-15): Study the following information carefully and answer the questions given below:
Nine persons are sitting in a row. Some of them are facing North and some are facing South. P sits 2nd from one of the extreme ends. Two persons sit between P and R. S sits 3rd to the left of R. U sits 2nd to the right of S. Immediate neighbors of S faces opposite to S. T sits 2nd to the right of U. W is an immediate neighbor of T. Persons sitting in an extreme end are facing opposite direction to each other. P sits 2nd to the right of T. W and P doesn't face North. Q sits 2nd to the left of V. X doesn't face south.

11. Who among the following person sits 3rd to the right of U?
(a) P (b) R (c) S
(d) T (e) None of these

12. How many persons are sitting between P and S?
(a) Two (b) Three (c) Five
(d) Four (e) One

13. Who among the following pair of persons are sitting at extreme end?
(a) S-V (b) V-X (c) P-W
(d) P-X (e) None of these

14. How many persons are facing South?
(a) Two (b) Three (c) Four
(d) Five (e) None of these

15. Four of the following five are alike in certain way based from a group, find the one which does not belong to that group?
(a) V (b) Q (c) W
(d) X (e) P

Direction (16-18): Study the following information carefully and answer the questions given below:
There are six ropes i.e. E, F, G, H, I and J of different lengths. F is longer than E. I is longer than F. I is shorter than only G. J is longer than F. E is not the shortest rope. The length of 2nd longest rope is 54cm and 3rd shortest rope is 30cm.

16. Which of the following is 3rd longest rope?
(a) I (b) J (c) F
(d) E (e) Can't be determined

17. What may be the possible length of J?
(a) 28cm (b) 42cm (c) 25cm
(d) 55cm (e) 60cm

18. Which of the following is 2nd shortest rope?
(a) J (b) F (c) E
(d) H (e) None of these

Direction (19-22): Read the information carefully and answer the following questions:
J is married to C. B and D are the children of C. D is married to daughter of K, who is married to M. K is mother of R, who is husband of N. H is the grandson of C and K. L is daughter of N. V is only sibling of H. D has only one daughter.

19. How is D related to K?
(a) Son (b) Wife (c) Son in law
(d) Daughter (e) None of these

20. If T is daughter of K, then how is T related to D?
(a) Wife (b) Son in law (c) Daughter
(d) Husband (e) None of these

21. How is L related to K?
(a) Wife (b) Granddaughter
(c) Daughter (d) Son (e) Grandson

22. Who is father of R?
(a) M (b) D (c) B
(d) J (e) C

23. Four of the following five are alike in certain way according to English dictionary form a group, find the one which does not belong to that group?
(a) NLQ (b) DBG (c) HFK
(d) TRW (e) XVY

Direction (24-27): In each of the questions below are given some statements followed by two conclusions. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.
(a) If only conclusion I follows.
(b) If only conclusion II follows.
(c) If either conclusion I or II follows.
(d) If neither conclusion I nor II follows.
(e) If both conclusions I and II follow.

24. **Statements:** Only a few Chart are Turbine
Only a few Turbine are Pores
Only a few Pores are fan
Conclusions: I. Some fan is chart is a possibility
II. All fan are Turbine

25. **Statements:** All Beaches are Deltas
All Deltas are cushions
No Cushions is wave
Conclusions: I. Some Beaches can be wave
II. No Deltas is Wave

26. **Statements:** Only a few Aces are Club
No club is Jack
Only a few Jack are Diamond
Conclusions: I. Some Diamond are Aces
II. Some Aces are Jack

27. **Statements:** Some Apple are Banana. No Banana is Date
Conclusions:
I. Some Date are not Apple is a possibility
II. All Apple can never be Date

Directions (28-32): Study the information carefully and answer the question given below.
There are ten persons J, P, Q, R, S, T, G, U, V and X living in a ten-floor building, such that ground floor is numbered as 1, just above the floor is numbered as 2 and so on the topmost floor is numbered as 10, but not necessary in the same order. P lives on the 5th floor. Only three persons live between P and V. T lives immediate above J, who lives on an odd numbered floor. S lives on one of the floors below R. Number of persons lives between J and P is same as number of persons lives between T and R. There is only one floor in between U and X. W lives on an odd numbered floor. R does not live on top floor. S lives on an odd numbered floor above X but not on seventh floor. V lives below the floor on which P lives. U lives above the floor on which X lives. Q lives on an even numbered floor above P but not on top floor.

28. How many persons live between W and S?
(a) One (b) Four (c) None
(d) Three (e) More than four

29. Who among the following Lives on topmost floor?
(a) V (b) W (c) T
(d) S (e) U

30. Four of the following five are alike in certain way based from a group, find the one which does not belong to that group?
(a) Q (b) X (c) U
(d) W (e) T

31. Who among the following lives immediate above Q?
(a) J (b) W (c) P
(d) S (e) V

32. Which of the following statement is not true about U?
(a) U lives on 4th floor
(b) Two persons live between U and W
(c) V lives immediate below U
(d) P lives immediate above U
(e) All are true

Direction (33-35): Study the following information carefully and answer the following question.
Six persons are sitting around a triangular table. Persons who are sitting at corner are facing towards the table and the persons who are sitting at middle of the table are facing outside the table. A sits at one of the corners of the table. M is an immediate neighbour of A. Two persons sit between M and B. C sits immediate right of B. N is to the immediate right of O. O does not sit at any of the corner of the table.

33. Who sits second to the right of B?
(a) M (b) A (c) N
(d) O (e) C

34. Who is sitting between A and N when counted from the right of A?
(a) C (b) B (c) O
(d) M (e) None of these

35. Who sits immediate left of N?
(a) M (b) C (c) O
(d) B (e) None of these

QUANTITATIVE APTITUDE

36. Four years hence, sum of ages of A and B will be 16 years more than the sum of present age of B and C. Four years ago, sum of age of A and C is 32 years then find the present age of C?
(a) 24 years (b) 20 years (c) 12 years
(d) 16 years (e) 18 years

37. A person purchased two articles at the same price and on selling the first article he makes a profit of 12%. Selling price of second article is Rs 90 more than the selling price of the first article. Find the cost price of one article if his overall profit percent is 15%?
(a) Rs 1800 (b) Rs 1500 (c) Rs 2000
(d) Rs 2400 (e) None of these

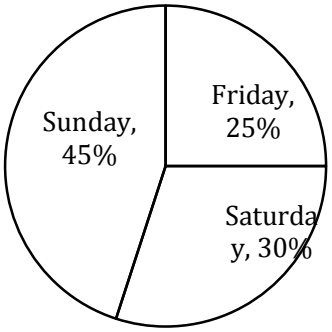
38. Ratio of speed of boat in still water to the speed of current is 10:1. Ratio of time taken by the boat to cover D km in downstream to the time taken by the boat to cover (D-45) km in upstream is 3:2. Then find the value of D?
(a) 60 km (b) 87 km (c) 99 km
(d) 108 km (e) 90 km

39. A container contains a mixture of milk and water in which water is 24%. 50% of the mixture is taken out in which water is 78 litre less than the milk. Find the remaining quantity of milk in that container?
(a) 171 lit (b) 152 lit (c) 133 lit
(d) 108 lit (e) 114 lit

40. The perimeter of a triangle is equal to perimeter of a rectangle. Length of rectangle is 75% of side of a square and ratio of length to breadth of rectangle is 3 : 2. If difference between perimeter of square and that of rectangle is 36 cm, then find perimeter of triangle?
(a) 60 cm (b) 48 cm (c) 72 cm
(d) 80 cm (e) 96 cm

Direction (41-45): Given below is the pie chart which shows the number of persons visiting a national park on different days and table shows the ratio of male to female visiting these parks.

Total Person - 400



Days	Male : Female
Friday	2 : 3
Saturday	5 : 7
Sunday	5 : 4

41. If on Monday number of males who visited national park are increased by 20% over males visiting national park on Saturday and Females visiting national park on Monday is $33\frac{1}{3}\%$ more than females visiting on Friday then, find the total persons visiting national park on Monday.
(a) 145 (b) 165 (c) 140
(d) 160 (e) 150

42. Total females visiting national park on Sunday and Saturday together are what percent more or less than total male visiting national park on Friday and Sunday together.
(a) $33\frac{1}{3}\%$ (b) $14\frac{2}{7}\%$ (c) $16\frac{2}{3}\%$
(d) $14\frac{1}{7}\%$ (e) $7\frac{1}{7}\%$

43. What is the average of males visiting national park on all these days
(a) $63\frac{1}{3}$ (b) $65\frac{2}{3}$ (c) $49\frac{2}{3}$
(d) $45\frac{1}{3}$ (e) $66\frac{2}{3}$

44. If cost of ticket per male and per female on any day is Rs 45 and Rs 40 respectively then total amount obtained by national park on Friday is how much more or less than total amount obtained by national park on Sunday (in Rs).
(a) 2800 (b) 3500 (c) 3000
(d) 3200 (e) 4200

45. What is the ratio of males visiting park on Friday to females visiting park on Saturday
(a) 4 : 5 (b) 7 : 3 (c) 3 : 7
(d) 4 : 7 (e) 7 : 4

Direction (46 – 50): Solve the given quadratic equations and mark the correct option based on your answer.
(a) if x>y
(b) if x≥y
(c) if x<y
(d) if x ≤y
(e) if x=y or no relation can be established between x and y.

46. **I.** $x^2 - 14x + 45 = 0$ **II.** $y^2 - 18y + 72 = 0$

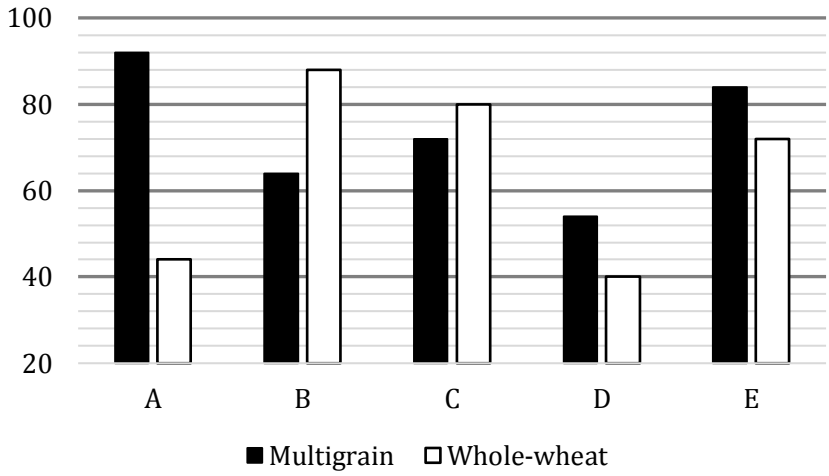
47. **I.** $x^2 + 7x + 12 = 0$ **II.** $y^2 + 9y + 20 = 0$

48. **I.** $4x^2 - 7x + 3 = 0$ **II.** $7y^2 - 17y + 6 = 0$

49. **I.** $2x^2 - 19x + 45 = 0$ **II.** $2y^2 - 9y + 4 = 0$

50. **I.** $x^2 = 144$ **II.** $(y + 12)^2 = 0$

Direction(51-55)- Study the bar-graph given below carefully and answer the questions.
Bar-graph given below shows the number of packets of flour sold by five stores of two types i.e. multigrain and whole-wheat.



51. Total number of packets sold by store C is approximately what percent more or less than number of packets sold by store E?
(a) 3% (b) 5% (c) 12%
(d) 23% (e) 17%

52. What is the ratio of number of packets sold of multigrain by store A and D together to number of packets sold of whole-wheat by store A and E together?
(a) 2 : 1 (b) 73 : 58 (c)43 : 41
(d)41 : 23 (e) None of these

53. Multigrain packets sold by store A and B together is what percent more or less than Whole-wheat packets sold by store C and D together?
(a) 25% (b) 20% (c) 30%
(d) None of these (e) 35%

54. If another store F sold number of multigrain packets which is average of number of multigrain packets sold by store C, D and E and number of whole-wheat packets sold is average of number of whole-wheat packets sold by store A and E. If store B sold each packet at Rs 240 and store F sold each packet at 20% more than that of B then find total price collected by store F?
(a) Rs 24246 (b) Rs 28246 (c) None of these
(d) Rs 36864 (e) Rs 32863

55. What is the difference of total number of multigrain packets sold by all store together and number of whole-wheat packets sold by all store together?
(a) 48 (b) 54 (c) 42
(d) 36 (e) 24

Directions (56-60): What will come in place of (?) in the following number series problems?

56. 200, 197, 185, 163, 130, ?
(a) 95 (b) 85 (c) 105
(d) 86 (e) 84

57. 15, 8, 9, 15, 32, ?
(a) 98 (b) 66 (c) 80.5
(d) 82.5 (e) 84.5

58. 5, 30, 150, 600, ?
(a) 1200 (b) 1500 (c) 2400
(d) 1800 (e) 600

59. 222, 110, 54, 26, ?
(a) 10 (b) 12 (c) 8
(d) 6 (e) 14

60. 104, ?, 96, 120, 88, 128
(a) 112 (b) 96 (c) 116
(d) 120 (e) 92

61. A invested Rs. X in a scheme. After 6 months, B joined with Rs. 4000 more than that of A. After an year, ratio of profit of B to the total profit was 3: 7. Find the value of X.
(a) 4000 (b) 8000 (c) 1600
(d) 6000 (e) 10000

62. 1500 rupees is invested in a scheme A at R% p.a. simple interest. Another amount (1500 - x) is invested in scheme B at 2R % p.a. simple interest. After 4 years, interest earned from scheme A is 25% less than that of scheme B. Find x.
(a) 500 (b) 600 (c) 900
(d) 1000 (e) 1200

63. 40 men can complete a work in 48 days. 64 men started for the same work for x days. After x days, 32 men increased, So, the remaining work is completed in 16(2/3) days. Find x.
(a) 5 (b) 8 (c) 10
(d) 6 (e) None of these

64. If perimeter of the base of a cylinder is 66 cm. Then find volume of cylinder if height of cylinder is 0.04 m
(a) 1111 cm^3 (b) 1386 cm^3 (c) 2046 cm^3
(d) 1186 cm^3 (e) 2002 cm^3

65. A 175 meters long train 'P' passed a pole in 8.75 sec. Train 'P' passed an another train 'Q' travelling in a direction opposite to 'P' in $\frac{60}{7}$ sec. If length of train 'Q' is 225 meter, then in what time train 'Q' will pass train 'P' when they both runs in same direction ?
(a) 55 sec (b) 50 sec (c) 45 sec
(d) 60 sec (e) 35 sec

Directions (66-70): Study the given information carefully and answer the question that follow.

3 pizza shops A, B and C sells veg pizza and non veg pizza. Respective ratio between number of vegetarian and non-vegetarian pizzas sold by pizza shop A was 9 : 7 and that sold by pizza shop B was 3 : 4. The no. of pizzas (Veg + non veg) sold by pizza shop C was 108 and respective ratio between number of vegetarian and non-vegetarian pizza sold by pizza shop C was 7 : 5 Total number of pizza sold by all three pizza shop was 376. Number of veg pizza sold by pizza shop A was 20% more than the veg pizza sold by pizza shop B.

66. If cost of each veg pizza and each non-veg pizza sold by shop B is Rs 200 and Rs 300 respectively then find the total amount obtained by shop B (in Rs).
(a) 40,000 (b) 36000 (c) 48000
(d) 32000 (e) 44000

67. What is the ratio of veg pizza sold by shop A & C together to the non-veg pizza sold by shop B & C together.
(a) 27 : 25 (b) 27 : 29 (c) 29 : 27
(d) 25 : 27 (e) 23 : 25

68. What is the average of veg pizza sold by all shops?
(a) 61 (b) 68 (c) 62
(d) 60 (e) 65

69. Total veg pizzas sold by Shop A and C are what percent of total non-veg pizza sold by shop B & C?
(a) 113% (b) 108% (c) 109%
(d) 112% (e) 116%

70. If Veg pizza sold by shop B is increased by $33\frac{1}{3}$% and non-veg pizza sold by shop A is increased by 75% then what is the sum of veg pizza sold by B and non-veg pizza sold by A after increment.
(a) 178 (b) 186 (c) 198
(d) 200 (e) 182

ENGLISH LANGUAGE

Directions (71-77): Read the following passage carefully and answer the questions given below. Certain words are given in bold to help you locate them while answering some of the questions.

Renewable energy is the future, and future is finally here. Global investment in renewable energy shot up last year, far outstripping investment in fossil fuels, according to a UN report. As the price of clean energy technology **plummets**, it has become an increasingly attractive prospect for world governments. China was by far the world's largest investor in renewable energy in 2017, **accounting for** nearly half of the new infrastructure commissioned. This was mainly a result of its massive support for solar power, which globally attracted nearly a fifth more investment than in the previous year. Other countries including Australia, Sweden and Mexico more than doubled the amount of money they pumped into clean energy projects. "Yet again, this was a record year for new renewable power capacity being financed," Francoise d'Estais from UN Environment's energy and climate branch told *The Independent*. "We had a record 157 gigawatts commissioned last year, far outstripping the fossil fuel generating capacity, which we estimated as 70 gigawatts."

In just over a decade, concerted investment has increased the proportion of world electricity generated by wind, solar and other renewable sources from around 5 per cent to 12 per cent. "*The electricity sector remains the brightest spot for renewables with the exponential growth of solar photovoltaics and wind in recent years, and building on the significant contribution of hydropower generation.*" But, electricity accounts for only a fifth of global energy consumption, and the role of renewables in the transportation and heating sectors remains **___(A)___** to the energy transition. The global replacement of traditional fuels with renewables led to around 1.8 gigatonnes of carbon dioxide emissions being avoided last year – the equivalent of removing the entire US transport system. According to the Wind and Solar Atlas, there are opportunities and potential for Wind and Solar plants in the East and West Nile areas that will produce around 31,150 MW from wind and 52,300 MW from solar. Egypt is also considering financing options to conduct feasibility studies for building the world largest solar power plant for both electricity generation and water desalination.

The UK has been performing well in clean energy generation, with recent figures showing wind and solar sources had overtaken nuclear as suppliers of electricity. However, despite these positive trends, 2017 saw a big drop of 65 per cent in British renewables investment. Experts have criticised the withdrawal of UK support for onshore wind, as previous analysis has demonstrated it already has the capacity to outcompete fossil fuels as a power source.

As renewable energy prices continue to fall, however, Professor Moslener said government subsidies are likely to become less and less important.

71. Which of the following facts are correct as per the given passage?
(I) The decrease in the cost of renewable energy resulted in its wide use.
(II) China massively supported solar power and became largest investor in renewable energy.
(III) Egypt is conducting feasibility studies for building largest solar power plant.
(a) Only (I)
(b) Only (II)
(c) Only (III)
(d) Both (II) and (III)
(e) All (I),(II)and(III)

72. What did the author mean by the line "*The electricity sector remains the brightest spot for renewables with the exponential growth of solar photovoltaics and wind in recent years, and building on the significant contribution of hydropower generation.*"?
(I) The growth of renewable energy in electricity sector is not that impressive.
(II) Electric sector has performed the best for renewables.
(III) Hydropower generation has a significant contribution in the electricity sector.
(a) Only (I)
(b) Only (II)
(c) None
(d) Both (II) and (III)
(e) All (I) (II) and (III)

73. Which of the following is/are the positive effect(s) of renewable energy?
(I) Overall increase in the global temperature.
(II) Carbon dioxide emissions were reduced to a considerable amount.
(III) Nile being converted into a biodiversity hotspot.
(a) Only (I)
(b) Only (II)
(c) Only (III)
(d) Both (II) and (III)
(e) All (I)(II) and (III)

74. Why government subsidies are likely to become less important?
(a) As China is increasing the investment in this sector.
(b) As the price of clean energy technology continues to plummet.
(c) As Fossil fuels is the better alternative
(d) As there are opportunities and potential for Wind and Solar plants in the East and West Nile areas
(e) None of these

75. Which of the following words will come in place of **(A)** as given in the passage?
(a) Elevate (b) Existence (c) Erratic
(d) Diabolic (e) Critical

76. Which of the following word is most similar in meaning to "**accounting for"** as given in the passage?
(a) contradict (b) contribute (c) Devious
(d) Retrieve (e) Categorical

77. Which of the following word is most similar in meaning to "**plummets"** as given in the passage?
(a) Intensify (b) Escalate (c) Callous
(d) Slump (e) reminiscent

Direction (78-83): Given below is a paragraph consisting of blanks against each number.
Identify the correct option among the five alternatives that perfectly fits into the given blank against the respective number to make the paragraph contextually meaningful and grammatically correct.

On October 29, 1929, Black Tuesday hit Wall Street as investors ___ **(8)** ___some 16 million shares on the New York Stock Exchange in a single day. Billions of dollars were lost, ___ **(9)** _____out thousands of investors. In the aftermath of Black Tuesday, America and the rest of the industrialized world ___ **(10)** _____downward into the Great Depression (1929-39), the deepest and longest-lasting economic _____ **(11)** ____in the history of the Western industrialized world up to that time. During the 1920s, the U.S. stock market underwent rapid expansion, reaching its peak in August 1929, after a period of wild speculation. By then, production had already declined and unemployment had risen, leaving stocks in great excess of their real value. Among the other causes of the eventual market collapse were low wages, the _____ **(12)** ____ of debt, a struggling agricultural sector and an excess of large bank loans that could not be liquidated. Stock prices began to decline in September and early October 1929, and on October 18 the fall began. Panic set in, and on October 24, Black Thursday, a record 12,894,650 shares were traded. Investment companies and leading bankers attempted to _____ **(13)** ____ the market by buying up great blocks of stock, producing a moderate rally on Friday.

78. (a) Traded (b) Invaded (c) Segregated
(d) Daunted (e) Halted

79. (a) Affording (b) Wiping (c) Wanting
(d) Vacating (e) Artificial

80. (a) Reprimanded (b) Embedded (c) Spiraled
(d) Mounted (e) Disregarded

81. (a) provided (b) Infiltration (c) Dismantle
(d) Downturn (e) Diversification

82. (a) Commotion (b) impair (c) significant
(d) Proliferation (e) renovate

83. (a) Infirmity (b) Credibility (c) Stabilize
(d) Burdened (e) Rationalize

Direction (84-88): In the questions given below, there is a sentence in which one part is given in bold. The part given in bold, may or may not be grammatically correct. Choose the best alternative among the four given which can replace the part in bold to make the sentence grammatically correct. If the part given in bold is already correct and does not require any replacement, choose option (e), i.e. "No replacement required" as your answer.

84. The plastic ban introduced by the municipality has been a total failure as there **has been no reducing** in the usage of polybags.
(a) is no reduce
(b) has been no reduction
(c) have been no reduced
(d) is not any reduced
(e) No correction required

85. As per the directives, the retail prices of both petrol and diesel **is revising** on a daily basis.
(a) have been revising
(b) are revising
(c) will be revised
(d) is revise
(e) No correction required

86. **We got** everything ready for all of them long before they arrived.
(a) We had got
(b) We have got
(c) We have been got
(d) We are getting
(e) No correction required

87. We still have some farm equipment that **hasn't been used** since my grandfather died.
(a) Hasn't been using
(b) was using
(c) are using
(d) should not have been use
(e) No correction required

88. Every officer and every resident of this village is determined **to do their best** to get better ranking in sanitation index.
(a) to do there best
(b) to do its best
(c) to do his best
(d) to do ones best
(e) No replacement required

Directions (89-93): In each of the questions given below a sentence is given with a blank. The sentence is then followed by five alternatives out of which one will fit the blank. Choose the alternative that will fit the blank most appropriately and make the sentence grammatically and contextually correct.

89. Administration has taken positive steps to _____ the education system.
(a) Increase (b) Devised (c) renovated
(d) revamp (e) dispel

90. Health and education sectors are one of the most _____ sectors in the global market.
(a) benefit (b) necessity (c) profit
(d) lucrative (e) Importance

91. She is an aware citizen who has always _____ to contribute to the progress of the country.
(a) wished (b) admiring (c) prepare
(d) motivating (e) stimulate

92. In the beginning I looked _____ and could not find quite the car I dreamed of.
(a) after (b) around (c) above
(d) out (e) down

93. The RBI has played conservative in _____ a rate cut of just 25 basis points.
(a) introduce (b) proposed (c) improving
(d) decrease (e) announcing

Directions (94-95): In the following questions two columns are given containing three sentences/phrases each. In first column, sentences/phrases are A, B and C and in the second column the sentences/phrases are D, E and F. A sentence/phrase from the first column may or may not connect with another sentence/phrase from the second column to make a grammatically and contextually correct sentence. Each question has five options which display the sequence(s) in which the sentences/phrases can be joined to form a grammatically and contextually correct sentence. Choose the pair(s) which make(s) a grammatically meaningful sentence.

94. **Column (1)**
(A) The rumors of petrol shortage
(B) The body of camera makes it
(C) There were no surprises
Column (2)
(D) Highly resistant for outdoor use.
(E) Turned out to be false.
(F) The key stakeholders in the economy
(a) C-F and A-D (b) B-F (c) A-F
(d) C-E (e) B-D and A-E

95. **Column (1)**
(A) As the rain water began to collect in pools on the highway
(B) For years, Argentina would dominate in World Cup qualifying matches
(C) Many have accused him of being a quiet misogynist
Column (2)
(D) One of the European countries during the late stages of the tournament
(E) Recently unearthed letters argue against this belief
(F) It began to hamper the flow of traffic
(a) C-F (b) B-F (c) A-F
(d) C-E (e) None of these

Directions (96-100): Read each sentence to find out whether there is any grammatical or idiomatic error in it. The error, if any, will be in one part of the sentence. The number of that part is the answer. If there is 'No error', the answer is (e). (Ignore errors of punctuation, if any.)

96. People have the freedom (a)/ of speech but at the (b)/ same time each of them (c)/ have to remember their fundamental duties (d)/ No error (e)

97. The number of students (a)/ competing in the event (b)/ has been fallen (c)/ because of the prize money. (d)/ No error. (e)

98. While he used to walk (a)/ along the road, (b)/ a wild and ferocious dog (c)/ knocked him down. (d)/ No error. (e)

99. Anaya is even willing (a)/ to make Mexico (b)/ one of the first countries to (c)/ introduces a universal basic income. (d) / No error. (e)

100. There were no surprises (a)/ in the second bimonthly monetary policy (b)/ announcement by the (c)/ Reserve Bank of India. (d)/ No error. (e)

Solutions

REASONING ABILITY

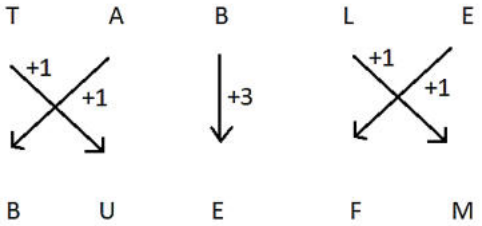
Direction (1-5):

Boxes	Colors
E	Pink
C	White
F	Orange
D	Black
A	Yellow
B	Red

1. (a); 2. (b); 3. (a);

4. (a); 5. (d);

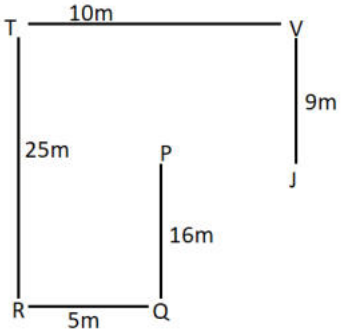
6. (a);



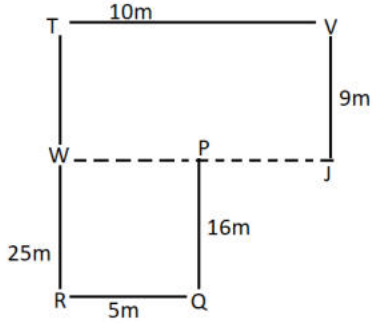
7. (e);

Direction (8-10):

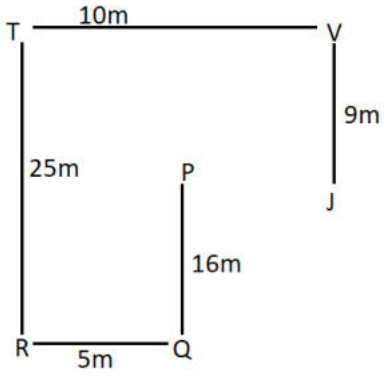
8. (c);



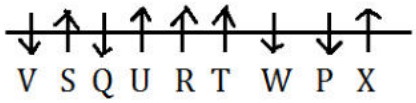
9. (b);



10. (c);



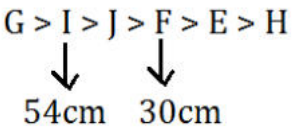
Direction (11-15):



11. (e); 12. (c); 13. (b);

14. (c); 15. (d);

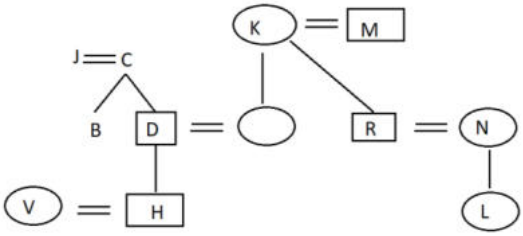
Direction (16-18):



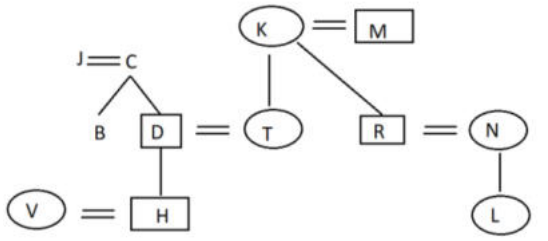
16. (b); 17. (b); 18. (c);

Direction (19-22):

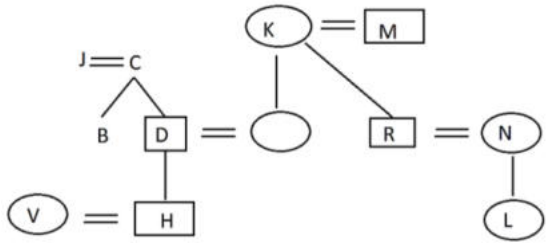
19. (c);



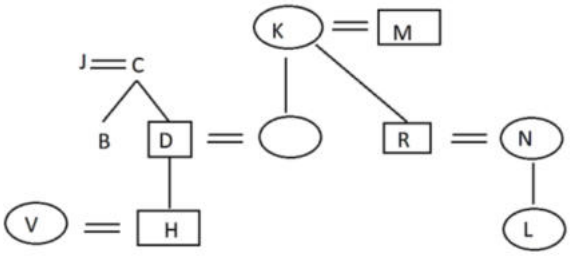
20. (a);



21. (b);



22. (a);

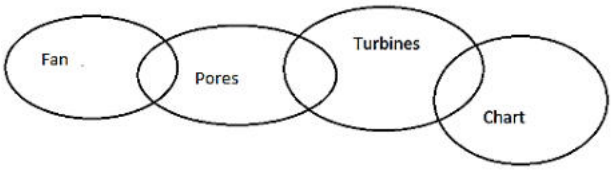


23. (e); The logic for the above question is discussed below.

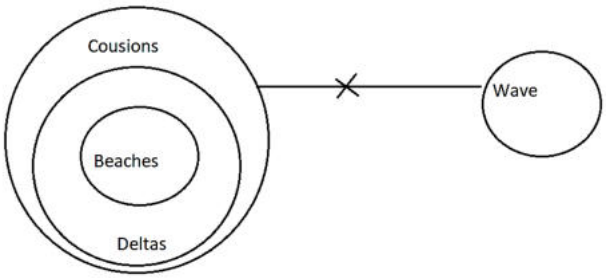
H $\xrightarrow{-2}$ F $\xrightarrow{+5}$ K

Direction (24-27):

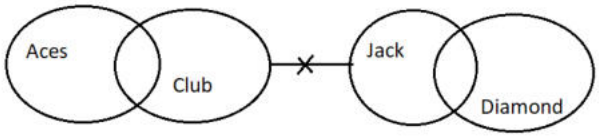
24. (a);



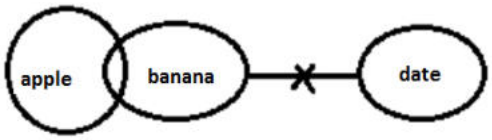
25. (b);



26. (d);



27. (e);



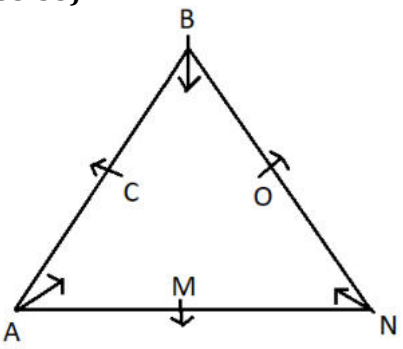
Direction (28-32):

Floors	Persons
10	T
9	J
8	Q
7	W
6	R
5	P
4	U
3	S
2	X
1	V

28. (d); **29. (c);** **30. (d);**

31. (a); **32. (c);**

Direction (33-35):



33. (b); **34. (d);** **35. (a);**

QUANTITATIVE APTITUDE

36. (d); Let the present age of A, B and C be x, y and z years respectively

ATQ

$(x + 4) + (y + 4) = (y + z) + 16$

$x - z = 8$ ... (i)

And $(x - 4) + (z - 4) = 32$

$x + z = 40$ ... (ii)

From (i) and (ii)

z=16 years

37. (b); Let the profit earned on second article be x%

Using allegation method,

12 x

15

(x-15) 3

1 : 1----------(ratio of cost price

⇒ x=18%
ATQ
6%= Rs 90
So, cost price= 100%= Rs 1500

38. (c); Let the speed of boat in still water and the speed of current be 10x km/hr and x km/hr respectively
ATQ
$\frac{\left(\frac{D}{11x}\right)}{\frac{D-45}{9x}} = \frac{3}{2}$
$D = 99\ km$

39. (e); Let the quantity of mixture be 100x lit
Quantity of milk= 76x lit
And quantity of water= 24x lit
Quantity of water taken= 12x lit
Quantity of milk taken= 38x lit
ATQ
26x = 78
x = 3 lit
required quantity of milk=114 lit

40. (a); Let side of square be '4x' cm
So, length of rectangle = $4x \times \frac{3}{4} = 3x\ cm$
And, breadth of rectangle = 2x cm
ATQ –
$4\times\ 4x - 2(3x + 2x) = 36$
6x = 36
x = 6 cm
Perimeter of triangle = perimeter of rectangle
= 2(18 + 12) = 60 cm

41. (c); Total Males visiting national park on Monday
$= \frac{30}{100} \times 400 \times \frac{5}{12} \times \frac{120}{100} = 120 \times \frac{5}{12} \times \frac{6}{5} = 60$
Total females visiting national park on Monday
$= \frac{25}{100} \times 400 \times \frac{3}{5} \times \frac{4}{3} = 80$
Required sum = 80 + 60 = 140

42. (e); Total female visiting national park on Sunday and Saturday together $= \frac{30}{100} \times 400 \times \frac{7}{12} + \frac{45}{100} \times 400 \times \frac{4}{9}$
= 70+ 80 = 150
Total male visiting national park on Friday and Sunday together
$= \frac{25}{100} \times 400 \times \frac{2}{5} + \frac{45}{100} \times 400 \times \frac{5}{9}$
= 40 + 100= 140
Required percentage $= \frac{150-140}{140} \times 100 = 7\frac{1}{7}\%$

43. (a); Required average $= \frac{40+50+100}{3} = \frac{190}{3} = 63\frac{1}{3}$

44. (b); Total amount obtained on Friday = 40 × 45 + 60 × 40
= 1800 + 2400 = Rs 4200
Total amount obtained on Sunday
= 100 × 45 + 40 × 80 = 4500 + 3200 = 7700
Required difference = 7700 – 4200 = Rs 3500

45. (d); Required ratio = 40 : 70 = 4 : 7

46. (e); **I.** $x^2 - 14x + 45 = 0$
$x^2 - 9x - 5x + 45 = 0$
$x(x-9) - 5(x-9) = 0$
x = 9, 5
II. $y^2 - 12y - 6y + 72 = 0$
$y(y - 12) - 6(y - 12) = 0$
y = 12, 6
no relation can be established between x and y.

47. (b); **I.** $x^2 + 7x + 12 = 0$
$x^2 + 4x + 3x + 12 = 0$
$x(x + 4) + 3(x + 4) = 0$
$(x+4)(x+3) = 0$
$x = -3, -4$
II. $y^2 + 5y + 4y + 20 = 0$
$y(y + 5) + 4(y + 5) = 0$
y = -5, -4
So , x≥y

48. (e); **I.** $4x^2 - 4x - 3x + 3 = 0$
$4x(x-1) - 3(x-1) = 0$
x = 1, 3/4
II. $7y^2 - 17y + 6 = 0$
$7y^2 - 14y - 3y + 6 = 0$
$7y(y - 2) - 3(y - 2) = 0$
y = 2 , 3/7
So, no relation can be established between x and y.

49. (a); **I.** $2x^2 - 10x - 9x + 45 = 0$
$2x(x - 5) - 9(x - 5) = 0$
x = 5, 9/2
II. $2y^2 - 8y - y + 4 = 0$
$2y(y - 4) - 1(y - 4) = 0$
y =4,1/2
So, x >y

50. (b); **I.** $x^2 = 144$
$x = -12, +12$
II. $y = -12$
So, x≥y

51. (a); Required % $= \frac{(84+72)-(72+80)}{(72+84)} \times 100 = 3\%$

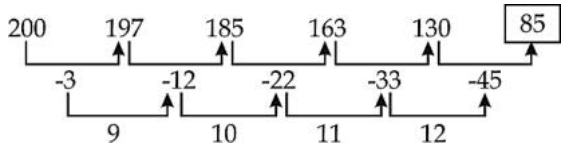
52. (b); Required ratio $= \frac{92+54}{44+72} = 73 : 58$

53. (c); Required % $= \frac{(92+64)-(80+40)}{(80+40)} \times 100 = 30\%$

54. (d); No. of packets sold by store F
$= \frac{1}{3}[72 + 54 + 84] + \frac{1}{2}[44 + 72]$
$= 70 + 58 = 128$
Required price = $128 \times 240 \times \frac{120}{100}$ = Rs 36864

55. (c); Required difference $= (92 + 64 + 72 + 54 + 84) - (44 + 88 + 80 + 40 + 72)$
= 366 – 324 = 42

56. (b);



57. (d); The pattern is – 15 × 0.5 + 0.5 = 8
8 × 1 + 1 = 9
9 × 1.5 + 1.5 = 15
15 × 2 + 2 = 32
32 × 2.5 + 2.5 = 82.5

58. (d); The pattern is - ×6, ×5, ×4, ×3, ×2,...
∴ ? = 600 × 3 = 1800

59. (b); The pattern is: × 0.5 – 1, × 0.5 – 1, × 0.5 – 1, × 0.5 – 1...
? = 26 × 0.5 – 1 = 12

60. (a); The pattern is: + 8, - 16, + 24, - 32, + 40
? = 104 + 8 = 112

61. (b); A/q, $\frac{Profit\ of\ B}{Total\ Profit} = \frac{3}{7} = \frac{(X+4000)\times 6}{X\times 12+(X+4000)\times 6}$
7X + 28000 = 9X + 12000
2X = 16000
X = 8000

62. (a); Interest earned from scheme A = $\frac{1500\times R\times 4}{100} = 60R$
Interest earned from scheme B
$= \frac{(1500-x)\times 2R\times 4}{100} = \frac{2R(1500-x)}{25}$
A/q, $60R = \frac{3}{4}\times\frac{2R(1500-x)}{25}$
1500 – x = 1000
x = 500

63. (a); A/q, $40 \times 48 = 64x + 96 \times \frac{50}{3}$
120 = 4x + 100
x = 5

64. (b); Radius of base of cylinder $= \frac{66}{2\times 22}\times 7 = \frac{21}{2}$ cm
Volume of cylinder $= \frac{22}{7}\times\frac{21}{2}\times\frac{21}{2}\times 4$
$= 1386\ cm^3$

65. (d); Let speed of train P = S_P
ATQ—
$S_P = \frac{175}{8.75} = 20$ m/s
Let speed of train Q = S_q
ATQ—
$20 + S_q = \frac{(175+225)\times 7}{60}$
$S_q = \frac{400\times 7}{60} - 20$
$S_q = \frac{80}{3}$ m/s
Relative speed if train P and Q running in same direction
$= \frac{80}{3} - 20 = \frac{20}{3}$ m/s
Required time $= \frac{(175+225)\times 3}{20} = 60$ sec

66. (b);

	A	B	C
Veg	72	60	63
Non-Veg	56	80	45

Required total amount
$= 60 \times 200 + 80 \times 300 = 12000 + 24000$
$= 36000$

67. (a); Required ratio $= \frac{72+63}{80+45} = \frac{135}{125} = \frac{27}{25}$

68. (e); Required ratio $= \frac{72+60+63}{3} = 65$

69. (b); Required percentage $= \frac{135}{125}\times 100 = \frac{27}{25}\times 100$
$= 108\%$

70. (a); Required sum $= \frac{4}{3}\times 60 + \frac{7}{4}\times 56$
$= 80 + 98 = 178$

ENGLISH LANGUAGE

71. (e); All of the given facts are correct as per the given passage. Facts can be derived from the lines, *"As the price of clean energy technology plummets, it has become an increasingly attractive prospect for world governments. China was by far the world's largest investor in renewable energy in 2017, accounting for nearly half of the new infrastructure commissioned. This was mainly a result of its massive support for solar power, which globally attracted nearly a fifth more investment than in the previous year." And "Egypt is also considering financing options to conduct feasibility studies for building the world largest solar power plant for both electricity generation and water desalination."* Thus option (e) is the best answer choice.

72. (d); Statements (II)and(III) can be easily inferred from the given line "*The electricity sector remains the brightest spot for renewables with the exponential growth of solar photovoltaics and wind in recent years, and building on the significant contribution of hydropower generation.*" Thus (d) is the correct answer.

73. (b); As per the given passage only (II) is correct. This can be inferred from the line, "The global replacement of traditional fuels with renewables led to around 1.8 gigatonnes of carbon dioxide emissions being avoided last year – the equivalent of removing the entire US transport system." Thus option (b) is correct answer choice.

74. (b); Refer to the last line of the passage.

75. (e); Critical here means having a decisive or crucial importance in the success, failure, or existence of something.

76. (b); Account for is a phrasal verb which means supply or make up (a specified amount or proportion)

77. (d); **Plummets** means fall or drop straight down at high speed hence **slump** is the word which is most similar in meaning to the given word.

78. (a); Option (a) is the correct answer choice. As the paragraph is talking about 1929 Stock Market Crash and the Great Depression. The line "…….. as investors _____some 16 million shares on the New York Stock Exchange in a single day," itself suggests that investors can only trade , out of the given options the correct answer choice should be option (a).
Segregated- set apart from the rest or from each other; isolate or divide.
Daunted- make (someone) feel intimidated or apprehensive.
Hence option (a) is the correct answer choice.

79. (b); Option (b) is the correct answer choice. The line "Billions of dollars were lost, _____out thousands of investors." (wiping- remove or eliminate (something) completely) suggest that option (b) should be the right answer choice. As the line conveys that after such a huge trading of Billions of dollars investors got eliminated from their job they then had nothing with them. Hence option (b) should be the correct answer choice.

80. (c); Option (c) is the correct answer choice. As the paragraph is talking about 1929 Stock Market Crash and the Great Depression. The line ". In the aftermath of Black Tuesday, America and the rest of the industrialized world _____downward into the Great Depression" itself suggest that the consequences or after-effects of a significant unpleasant event like stock market crash resulted into the continuous downfall and depression of America and rest of the industrialized world.
Spiraled- decrease or deteriorate continuously.
Reprimanded- address a reprimand to.
Hence option (c) is the correct answer choice.

81. (d); Option (d) is the correct answer choice. As the paragraph is talking about 1929 Stock Market Crash and the Great Depression. The line "the deepest and longest-lasting economic _____in the history of the Western industrialized world up to that time." Is talking about the great depression that was caused due to the stock market crash the line conveys that it was the greatest depression or downturn in the history of Western industrialized word that it has faced ever.
Dismantle- take (a machine or structure) to pieces
Downturn- a decline in economic, business, or other activity
Hence the meaning of the given word suggests that option (d) should be the right answer choice.

82. (d); Option (d) is the correct answer choice. option (b), (c) and (e) are out of context. As the paragraph is talking about 1929 Stock Market Crash and the Great Depression. The line "Among the other causes of the eventual market collapse were low wages, the _____of debt, a struggling agricultural sector and an excess of large bank loans that could not be liquidated" conveys that out of the many, one of the reason of the collapse were low wages, rapid increase in the number of debt, the unliquidated large bank lo
Commotion- a state of confused and noisy disturbance
Proliferation- rapid increase in the number or amount of something
Hence the right answer choice is option (d).

83. (c); Option (c) is the correct answer choice. As the paragraph is talking about 1929 Stock Market Crash and the Great Depression. The line "Investment companies and leading bankers attempted to _____ the market by buying up great blocks of stock, producing a moderate rally on Friday" talks about the efforts made by the leading bankers and investment companies to stabilize the market after such a huge depression in the stock market.
Rationalize- attempt to explain or justify (behaviour or an attitude) with logical reasons, even if these are not appropriate.
Hence option (c) is the correct answer choice.

84. (b); Replace "has been no reducing" with "has been no reduction".

85. (c); The subject "Retail prices" is in plural number therefore the usage of "is" is incorrect .
We will replace "is revising" with "will be revised".

86. (a); Use "We had got" in place of "we got" because when we talk about the two incidents of past for the first incident use past perfect and for the later activity we use past indefinite.

87. (e); The given sentence, along with the highlighted phrase is grammatically correct and contextually meaningful; thus it doesn't require any corrections. Hence, option (e) is the most suitable answer choice.

88. (c); Here, we will replace 'their' with 'his'. When two singular nouns are connected by 'and' and 'each' or 'every' is used before them, then they are considered as singular nouns. In such cases, the verb used with them will be in singular form and the pronoun used for the subject will also be singular. Hence, option (c) is the correct answer.

89. (d); Option (d) is the correct choice for the given question.
Revamp means give new and improved form, structure, or appearance to.
Dispel means make (a doubt, feeling, or belief) disappear.

90. (d); Lucrative is correct.
Lucrative means producing a great deal of profit. It also makes the sentence grammatically correct.

91. (a); Option (a) is the correct choice for the given question.
Stimulate means encourage or arouse interest or enthusiasm in.

92. (b); Look around means [INTRANSITIVE] to try to find something that you want or need.

93. (e); Option (e) is the correct choice for the given question.

94. (e); B-D :: The body of camera makes it highly resistant for outdoor use.
A-E::: The rumors of petrol shortage turned out to be false.

95. (c); Only sentence (A) and (F) makes a perfect match. Word 'highway' and 'traffic' give us a clue. None of the two sentences makes the meaningful coherent sense. Had the sentence C and E been connected with 'but' it would be a possible match. Hence option (c) is the correct answer choice.

96. (d); The error is in the part (d) of the sentence. 'have' should be replaced by 'has' because 'each of', 'either of', always takes the singular verb.

97. (c); 'Has fallen' will be used in place of 'has been fallen' as there is no passive form of intransitive verb (fall).
(Note: Verbs are of two types namely transitive verbs and intransitive verbs. Transitive verbs need an object while Intransitive verbs cannot have an object. Ex. "I bought a car" in which 'bought' is transitive. "The Baby smiled", 'smiled' is an intransitive verb)

98. (a); Replace 'While he used to walk' with 'while he was walking'. For the two incidents of past, if one continues and the other one has happened, then past continuous tense is used for the former and simple past for latter.
Example. While I **was walking** along the road, a mad dog attacked me.

99. (d); The sentence becomes grammatically incorrect in part (d) of it. Instead of **"introduces"**, **"introduce"** is required as after the phrase **'one of the'** the noun or pronoun used is plural, however, the **verb** should be in its **singular form** as there is the use of "to-infinitive" which is followed by the first form of the verb. Hence, **option (d)** is the most viable choice.

100. (e); The given sentence is grammatically correct

Mock 02

SBI PO Prelims 2018

REASONING ABILITY

Directions (1–4): Study the following information carefully and answer the questions given below:

Eight persons i.e. A, B, C, D, E, F, G and H who all belongs to different countries i.e. P, Q, R, S, T, U, V and W but not necessarily in the same order. A does not belongs to country P and U. D does not belongs to country P and Q. C belongs to T. Neither D, B and G belongs to country S. F does not belongs to country R and Q. Neither G nor B belongs to country P and V. H belongs to U. A does not belongs to country V. F does not belongs to country P. B and D does not belong to country R and V.

1. Which of the following combination is incorrect?
(a) B-Q (b) F-V (c) D-W
(d) A-P (e) None of these

2. Who among the following belongs to country Q?
(a) D (b) B (c) E
(d) G (e) None of these

3. G belongs to which of the following country?
(a) T (b) P (c) W
(d) S (e) None of these

4. Who among the following person belongs to country W?
(a) D (b) E (c) F
(d) H (e) None of these

Directions (5–7): Each of the questions below consists of a question and two statements numbered I and II given below it. You have to decide whether the data provided in the statement are sufficient to answer the question. Read both the statements and Give answer:
(a) If the data in statement I alone are sufficient to answer the question, while the data in statement II alone are not sufficient to answer the question.
(b) If the data in statement II alone are sufficient to answer the question, while the data in statement I alone are not sufficient to answer the question.
(c) If the data either in statement I alone or in statement II alone are sufficient to answer the question.
(d) If the data even in both statements I and II together are not sufficient to answer the question.
(e) If the data in both statements I and II together are necessary to answer the question.

5. In a certain code language 'Notice seeking his location' is coded as 'ti ki lo ab'. Then what is the code for 'Seeking' in that coded language?
I. 'Court Notice seeking permission' is coded as 'ro ti rm ki' in the coded language.
II. 'countries permit seeking cooperation' is coded as 'nu mi ki po' in the coded language.

6. Six persons i.e. A, B, C, D, E and F are sitting around a circle facing inside. Who among the following sits second to the right of E?
I. B sits second to the right of A. D is not the immediate neighbour of B. Only one person sits between D and E. Neither F nor C is the immediate neighbour of E. C is not the neighbour of B.
II. Only two person sits between B and C. D sit second to the right of A. E sits second to the left of F. E is not the immediate neighbour of B.

7. Five persons i.e. M, N, O, P and Q who all are standing in open ground in a certain direction to each other. In which direction is M with respect to P?
I. Q is in the south of N, who is in the west of M. O is in the northeast of P, who is in the east of Q. O is in the east of M. Distance between Q and P is same as the distance between M and N.
II. N is in the southwest of O, and is in the south of person P. Person O is in the east of M.

Directions (8–12): Read the following information carefully and answer the questions given below:
Eight people A, B, C, D, E, F, G, H are sitting in a linear row. Four of them are facing north while four are facing south. Three persons sits to the left of C. As many as persons sit between A and D as between B and F. Only B sits between C and A. A sits second to the left of C. A faces north direction. F does not sit at an extreme end. E sits second to the left of D and faces same direction as D. D is not an immediate neighbour of C. E does not face north direction. H sits forth to the right of G and G faces opposite direction as C. Both F and H faces same direction.

8. Who among the following sits third to the right of A?
(a) G (b) C (c) D
(d) F (e) none of these

9. How many persons are sitting between B and D?
(a) One (b) More than three
(c) Three (d) None (e) Two

10. Which of the following pair sits at an extreme end?
(a) H, E (b) B, D (c) C, A
(d) F, B (e) none of these

11. Who among the following sits immediate left of G?
(a) E (b) C (c) D
(d) F (e) none of these

12. How many persons sit between H and C?
(a) One (b) More than three
(c) Three (d) None (e) Two

Directions (13-17): Study the following information carefully and answer the given questions:
In a certain code language:
"Coming from the village" is written as "543 721 689 384
"the innocent village people" is written as "827 543 962 721"
"village heat for people" is written as "235 827 721 475"

13. If "people for money" is written as "827 235 735". What will be the code for "money heat village"?
(a) 735 475 721 (b) 735 235 543
(c) 543 721 827 (d) 235 827 475
(e) None of these

14. What will be the code for "village"?
(a) 543 (b) 721 (c) 235
(d) 475 (e) None of these

15. If "coming heat village" is written as "384 475 721". What will be the code of "heat coming tax"?
(a) 384 475 689 (b) 475 384 543
(c) 475 384 119 (d) 384 475 235
(e) None of these

16. What will be the code of "coming"?
(a) 689 (b) 543 (c) 721
(d) either 689 or 384
(e) None of these

17. What will be the code of "the"?
(a) 543 (b) 962 (c) 721
(d) 235 (e) None of these

Directions (18-22): Read the following information carefully and answer the questions given below:

A certain number of persons are sitting in a row and all of them are facing in north direction. Each of them likes different flowers. The one who likes Rose sits fourth to the right of the one who likes Jasmine. W sits second to the right of the one who likes Rose. K sits immediate left of the one who likes Jasmine. Only two persons sit between the one who likes Rose and T. Q sits fifth to the left of T. The one who likes Lily sits fifth to the left of the one who likes Jasmine. N sits immediate left of Q and he does not like Lily. Only one person sits between N and H. Only six persons sit to the left of K. H likes Dahlia and only one person sit between the one who likes Dahlia and Lotus. N does not like Lotus. The one who likes Lotus sits sixth from the right end.

18. How many total number of persons are sitting in the row?
(a) 14 (b) 18 (c) 16
(d) 15 (e) None of these

19. How many persons sit between K and H?
(a) Four (b) Two (c) Three
(d) One (e) None of these

20. Which of the following flower is liked by the one who sit second to the left of Q?
(a) Jasmine (b) Lily (c) Dahlia
(d) Rose (e) None of these

21. Who among the following sit third from the left end?
(a) The one who likes Jasmine (b) The one who likes Lily (c) W
(d) N (e) None of these

22. How many persons sit between the one who likes Rose and N?
(a) Four (b) Two (c) Three
(d) One (e) None of these

Direction (23-25): Study the following information carefully and answer the given questions.
G is the only sister of H. A is the only son of H. B and D are siblings of A. A is married to the daughter of P. G is unmarried.

23. If S is married to P, then how is S related to A?
(a) Father (b) Mother (c) Mother in law
(d) Either father in law or mother in law
(e) None of these

24. If J is mother of A, then how is G related to J?
(a) Sister (b) Brother in law
(c) Sister in law (d) Mother
(e) None of these

25. How is B related to A?
(a) Father (b) Sister (c) Father in law
(d) Mother (e) None of these

Directions (26-30): Read the following information carefully and answer the questions given below:
Ten persons A, B, C, D, E, F, G, H, I, J are living in a five storey building such as ground floor is numbered as 1, above it is floor 2 then top floor is numbered as 5. Each of the floor has 2 flats in it as flat-1 and flat-2. Flat-1 of floor-2 is immediately above flat-1 of floor-1 and immediately below flat-1 of floor-3 and so on. In the same way flat-2 of floor-2 is immediately above flat-2 of floor-1 and immediately below flat-2 of floor-3 and so on. B lives on floor-2 and E lives to the west of B. There is two floors gap between B and G. I lives to the east of H. G does not live in the same flat number as H. There is a two floors gap between D and F. A lives to the west of D but does not live on ground floor. J lives above C. J and C live in same flat number.

26. Who among the following lives on flat-1 of floor-3?
(a) E (b) C (c) H
(d) F (e) none of these

27. Who among the following lives to the east of C?
(a) E (b) G (c) D
(d) F (e) none of these

28. How many floors gap is there between J and E?
(a) One (b) Two (c) None
(d) Three (e) none of these

29. I lives on which of the following floor?
(a) floor-1 (b) floor-2 (c) floor-3
(d) Floor-4 (e) floor-5

30. Who among the following lives to the west of G?
(a) J (b) C (c) D
(d) F (e) none of these

31. What will come in the place of question mark in the given series?
BX-7, DV-14, FT-28, HR-56, ?
(a) JQ-112 (b) JP-112 (c) KP-112
(d) JP-114 (e) None of these

32. How many pairs of letters are there in the word "KILOGRAM" each of which have as many letters between them (in both forward and backward direction) in the word as they have between them in the English alphabetical series?
(a) None (b) One (c) Two
(d) Three (e) More than three

33. If "3265" is the input, output will be "6532". Similarly, for input "7489", output will be "9874". So, what will be the output of input "8154"?
(a) 8451 (b) 5481 (c) 8541
(d) 4581 (e) None of these

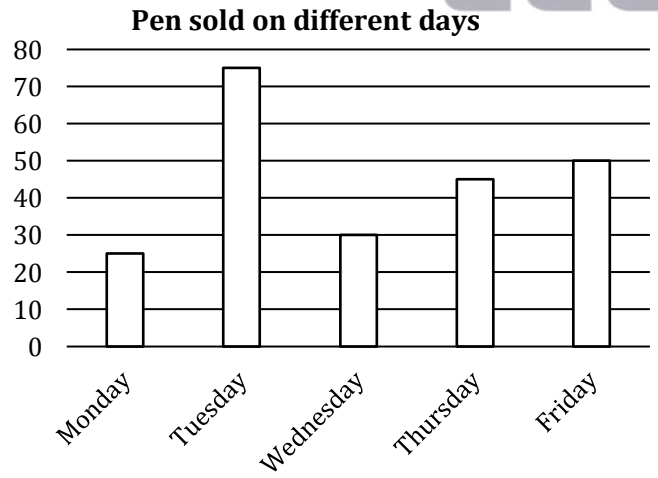
Direction (34-35): Study the following information carefully and answer the questions.
Size of plate F and B are greater than plate A. Plate C is greater than A but smaller than F and B. D is not smallest but smaller than C. Size of plate F is smaller than plate E but greater than plate B. It is given 3rd largest plate is 132 cm. Smallest plate is 69 cm.

34. What may be the value of plate C?
(a) 117 cm (b) 135 cm (c) 169 cm
(d) 158 cm (e) None of these

35. Which one is the greatest plate (according to size)?
(a) F (b) B (c) D
(d) E (e) None of these

QUANTITATIVE APTITUDE

Directions (36-40): Bar graph given below shows pens sold by a retailor on five different days. Study the data carefully and answer the following questions



36. Find the difference between total number of pens sold on Monday and Tuesday together to total number of pens sold on Thursday and Friday together?
(a) 15 (b) 10 (c) 5
(d) 20 (e) 0

37. Total number of pens sold on Saturday is 40% more than total number of pens sold on Wednesday. Find total number of pens sold on Friday and Saturday together?
(a) 92 (b) 110 (c) 72
(d) 108 (e) 85

38. Total number of pens sold on Tuesday are 25% more than total number of pens sold on Sunday. Find total number of pens sold on Sunday?
(a) 64 (b) 50 (c) 94
(d) 60 (e) 55

39. Out of total pens sold on Thursday, 20% are blue ink pen. Out of remaining 25% are red ink pen and remaining are black in pen. Find total number of blue and black ink pen sold on Thursday?
(a) 27 (b) 36 (c) 45
(d) 39 (e) 30

40. Out of total pens sold on Tuesday ratio between total defective pens sold to total pens sold is 7 : 15. Find total number of non-defective pens sold on Tuesday by retailer?
(a) 20 (b) 25 (c) 30
(d) 35 (e) 40

41. Quantity I. 'x' : $x^2 + x - 6 = 0$
Quantity II. 'y' : $y^2 + 7y + 12 = 0$
(a) Quantity I > Quantity II
(b) Quantity I < Quantity II
(c) Quantity I ≥ Quantity II
(d) Quantity I ≤ Quantity II
(e) Quantity I = Quantity II or No relation

42. A's efficiency is 25% more than B
Quantity I – 'x' : A can do $\frac{5}{6}$th of total work in 'x' days
Quantity II –'y' : B can do $\frac{4}{5}$th of total work in 'y' days
(a) Quantity I > Quantity II
(b) Quantity I < Quantity II
(c) Quantity I ≥ Quantity II
(d) Quantity I ≤ Quantity II
(e) Quantity I = Quantity II or No relation

43. Sum of 8 consecutive even number is S_1.
Quantity I – Sum of second number and eight number in S_1
Quantity II – Sum of third number and sixth number in S_1
(a) Quantity I > Quantity II
(b) Quantity I < Quantity II
(c) Quantity I ≥ Quantity II
(d) Quantity I ≤ Quantity II
(e) Quantity I = Quantity II or No relation

44. An article is sold at Rs. 1500 after allowing discount of 12.5% on Marked price.
Quantity I –Rs.550
Quantity II –Mark price of article.
(a) Quantity I > Quantity II
(b) Quantity I < Quantity II
(c) Quantity I ≥ Quantity II
(d) Quantity I ≤ Quantity II
(e) Quantity I = Quantity II or No relation

45. If a speed of boat is 500% more than the speed of a current.
Quantity I –'x' : If boat can travel a distance of 63 km in 3 hr, in downstream then 'x' is the speed of the boat in upstream (km/hr).
Quantity II – 15 km/hr
(a) Quantity I > Quantity II
(b) Quantity I < Quantity II
(c) Quantity I ≥ Quantity II
(d) Quantity I ≤ Quantity II
(e) Quantity I = Quantity II or No relation

Direction (46-50): What number is wrong according to given number series pattern: –

46. 1, 3, 9, 31, 128, 651, 3913
(a) 9 (b) 1 (c) 128
(d) 31 (e) 3913

47. 291, 147, 75, 39, 22, 12, 7.5
(a) 22 (b) 291 (c) 147
(d) 75 (e) 7.5

48. 26, 27, 34, 58, 106, 186, 306
(a) 26 (b) 34 (c) 58
(d) 106 (e) 27

49. 5.9, 6, 6.1, 6.4, 7.9, 18.5, 112.9
(a) 6 (b) 5.9 (c) 6.1
(d) 18.5 (e) 112.9

50. 330, 80, 280, 120, 250, 130, 240
(a) 330 (b) 130 (c) 280
(d) 240 (e) 80

51. Sum of volume of cylinder (S) and volume off cone (c) is $2190\pi\ cm^2$ & height of both cylinder and cone is same i.e, 10 cm. If radius of cone is 15 cm then find the ratio of radius of S to radius of C?
(a) 1 : 2 (b) 3 : 4 (c) 2 : 5
(d) 4 : 5 (e) 3 : 5

52. In a box there are 6 blue ball, X red balls & 10 green balls. Probability of choosing one red ball from the given box is $\frac{1}{3}$. Then find the sum of red and blue balls in the box?
(a) 20 (b) 12 (c) 14
(d) 18 (e) 16

53. Sum of A's and B's age 6 years ago is 88. A's age 18 yrs ago is equal to B's age 6 years ago. Find the age of A two year hence?
(a) 58 yrs (b) 64 yrs (c) 42 yrs
(d) 52 yrs (e) 48 yrs

54. Train A of length 120 m can cross a platform of length 240 m in 18 second the ratio of speed of train A and Train B is 4 : 5. Then find the length of Train B if train B can cross a pole in 12 seconds.
(a) 280 m (b) 300 m (c) 320 m
(d) 350 m (e) 240 m

55. What is the probability of forming word from the letters of word "IMPEACH" such that all vowels come together?
(a) $\frac{8}{35}$ (b) $\frac{1}{7}$ (c) $\frac{3}{35}$
(d) $\frac{17}{35}$ (e) $\frac{2}{7}$

Direction (56-60): Find the value of (?) in following approximation questions:

56. $2^{?} = 32.01 \div 128.01 \times 1023.99 \div 7.99$
(a) 7 (b) 3 (c) 4
(d) 5 (e) 8

57. $\frac{339.99}{?} = \sqrt{143.99} + \sqrt{64.01}$
(a) 17 (b) 20 (c) 10
(d) 34 (e) 40

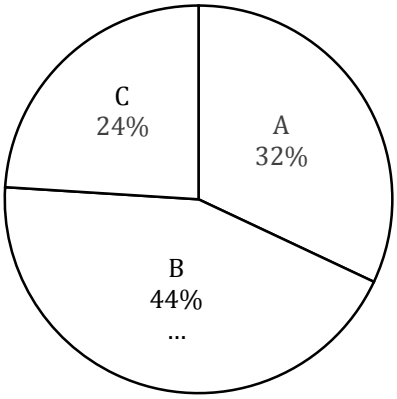
58. 34.02% of 550.09 ÷ ? = 297.07 ÷ $\sqrt{728.95}$
(a) 14 (b) 21 (c) 8
(d) 27 (e) 17

59. (? ÷ 9.97) × 12.08 = 20.12% of 1319.97
(a) 220 (b) 240 (c) 260
(d) 280 (e) 200

60. ? % of 179.99 = $\sqrt{(24.02)^2 + (17.98)^2 + 60.01\% \text{ of } 659.98}$
(a) 80 (b) 60 (c) 40
(d) 20 (e) 10

Direction (61-65): Pie chart given below shows total number of workers in three different companies. Table given below shows ratio between officers and workers working in these companies. Study the data carefully and answer the following questions

Total workers = 900



Company	Officers : Workers
A	1 : 16
B	1 : 18
C	1 : 12

Note: - Total employees = Officers + Workers

61. Find the ratio between total number of workers in company A and C together to total number of officers in company A and C together?
(a) 16 : 1 (b) 12 : 1 (c) 14 : 1
(d) 18 : 1 (e) 20 : 1

62. Total number of employees in company 'B' is how much more than total number of employees in company 'C'.
(a) 174 (b) 194 (c) 204
(d) 214 (e) 184

63. Total number of officers in company 'A' is how much less than total number of officers in company 'B'?
(a) 4 (b) 2 (c) 0
(d) 6 (e) 8

64. Total number of officers and workers in company D is 50% and 25% more than total number of officers and workers in company 'C' respectively. Find total number of employees in company 'D'?
(a) 279 (b) 297 (c) 342
(d) 324 (e) 306

65. Find the difference between total number of workers in company 'A' and total number of workers in company 'B' and 'C' together?
(a) 432 (b) 396 (c) 360
(d) 324 (e) 288

Direction (66-70): There are three persons A, B and C who each invested in two different scheme S_1 and S_2. A in invested Rs 80,000 for 2 yr in scheme S_1 and 30,000 for 4 years in scheme S_2. B invested Rs 30,000 for 3year in S_1 and he did not invest in scheme B. B also obtained a profit of 10,000 by selling his car. C invested Rs 50000 for 5 years in scheme S_1 and 10000 for 3 year in scheme S_2. Total profit obtained from scheme S_1 is 2 lakh and scheme S_2 is 90,000.

66. What is the ratio of total profit obtained by B and profit obtained by C from scheme S1
(a) 23 : 47 (b) 54 : 47 (c) 36 : 43
(d) 23 : 50 (e) 27 : 50

67. Profit obtained by A from scheme S_1 is what percent of profit obtained by C from scheme S_2.
(a) $346\frac{7}{9}\%$ (b) $347\frac{8}{9}\%$ (c) $356\frac{7}{9}\%$
(d) $345\frac{4}{9}\%$ (e) $355\frac{5}{9}\%$

68. If sum of investment of A in both schemes and total profit obtained by A from both scheme is invested at compound Interest at the rate of 20% p.a. then find the total compound interest obtained in 2 yr
(a) 108240 (b) 104206 (c) 105208
(d) 109280 (e) 106220

69. What is the average of profit attained by A from scheme S1 and profit of C obtained from scheme S2.
(a) 41000 (b) 42000 (c) 44000
(d) 55000 (e) 40000

70. If A had invested his sum at Simple Interest for 3 yr at the rate of R% p.a. instead in scheme S_1 and B has invested his sum at compound Interest at (R + 5%) p.a. for 1 year and difference in interest obtained is 30,000 then find value of R%.
(a) 10% (b) 9% (c) 15%
(d) 18% (e) 12%

ENGLISH LANGUAGE

Directions (71-78): In the questions given below, there is a sentence in which one part is given in bold. The part given in bold may or may not be grammatically correct. Choose the best alternative among the four given which can replace the part in bold to make the sentence grammatically correct. If the part given in bold is already correct and does not require any replacement, choose option (e) , i.e. "No replacement required" as your answer.

71. Nobody can deny the fact that Indian economy **is very different than** American economy.
(a) are very different than
(b) is so much different than
(c) are very different from
(d) is very different from
(e) No replacement required

72. Accurate **statistics with regards to** the area occupied in different forms of cultivation are difficult to obtain.
(a) statistic with regards to
(b) statistics with regard to
(c) statistic with regard to
(d) statistics in regards to
(e) No replacement required

73. Seldom if ever was there any training or instructions in such tactics for either the tank crews or the infantry formations.
(a) Seldom or never
(b) Seldom if never
(c) Seldom or ever
(d) Seldom has ever
(e) No replacement required

74. As soon as I opened the front door of my house, **than I smelled** the distinctive aroma of fresh coffee.
(a) then I smelled
(b) that I smelled
(c) I smelled
(d) I smell
(e) No replacement required

75. Although he had fewer supporters among the governing class, **but he was able** to get the popular vote.
(a) he was able
(b) and he was able
(c) else he was able
(d) or he was able
(e) No replacement required

76. The party explicitly **denies that they are not** involved in mainstream politics.
(a) denied that they are not
(b) denies that they were
(c) denied that they are
(d) deny that they are not
(e) No replacement required

77. I would rather be a poor man in a garret with plenty of good books to read than a king **who did not loved** reading.
(a) who do not loved
(b) who did not love
(c) whom did not loved
(d) whom did not love
(e) No replacement required

78. The relatively static lattice in a diamond ensures that the scattering is at a minimum and the thermal conductivity **is exceptional** good.
(a) are exceptional
(b) was exceptional
(c) are exceptionally
(d) is exceptionally
(e) No replacement required

Directions (79-83): Select the phrase/connector (it must be at the start) from the given three options which can be used to form a single sentence from the two sentences given below, implying the same meaning as expressed in the statement sentences.

79. We see ourselves repeating our ordinary routine. We realize how much wealth surrounds our life.
(i) When we see ourselves ……
(ii) Our ordinary routine……..
(iii) Realizing how much wealth……
(a) Only (i)
(b) Both (ii) and (iii)
(c) Only (iii)
(d) Only (ii)
(e) None of these

80. There is a growing influence of the Indian Diaspora on Capitol Hill.Trump will certainly see the advantages of doing business with India.
(i) As there is a growing influence of…
(ii) The growing influence of the Indian…
(iii) With the growing influence of the Indian..
(a) Only (i) is correct
(b) Only (iii) is correct
(c) Both (i) and (ii) are correct
(d) Both (i) and (iii) are correct
(e) All are correct

81. There was no democracy in British India.The rulers could take bold decisions fearlessly without bothering about repercussions.
(i) As there was no democracy in British India…
(ii) Since there was no democracy in British…
(iii) With the rulers taking bold decisions…
(a) Only (i) is correct
(b) Only (ii) is correct
(c) Both (i) and (ii) are correct
(d) Both (ii) and (iii) are correct
(e) All are correct

82. Twelve million youth enter the Indian work force every year. Eighty per cent of these youth are unskilled.
(a) While eighty per cent ……
(b) Since twelve million ……..
(c) Of the twelve million ……..
(a) Only (a)
(b) Only (c)
(c) Only (a) and (c)
(d) All (a) , (b) and (c)
(e) None of these

83. Scientists build climate models—computer simulations of the climate system.They are doing this to further explore the causes and effects of global warming
(i) To further explore…
(ii) Scientists are building…
(iii) Predicting effects of global warming…
(a) Only (i) is correct
(b) Only (ii) is correct
(c) Only (iii) is correct
(d) Both (i) and (ii) are correct
(e) All are correct

Directions (84-89): Given below the sentences each of which has been divided into five parts out of which the first part has been marked bold. Each of the questions is then followed by the five options which give the sequence of the rearranged parts. You must choose the option which gives the correct sequence of the parts. If the sentence is already arranged or the correct sequence doesn't match any of the given sequence, mark (e) .i.e. "None of the above" as your answer.

84. The apex court had ordered that the/ of the biometric scheme and the enabling law(a) / deadline be extended till the five-judge constitution(b) / on petitions challenging the validity(c) / bench delivers its judgment(d)
(a) ACDB (b) BCAD (c) BDCA
(d) CADB (e) None of the above

85. Repealing the law that safeguards/ the floodgates of poaching(a) / and it would lead to(b) / marginalisation of the indigenous people(c) /the indigenous people would open(d)
(a) DCBA (b) DABC (c) ACBD
(d) BACD (e) None of the above

86. My thoughts are with the families/ in this unfortunate accident(a) / recovery of the injured(b) / of those who have lost their loved ones(c) / I pray for the speedy(d) /
(a) BCAD (b) DACB (c) ACBD
(d) CADB (e) None of the above

87. Several people became leaders/ remained where they were(a) / and Ministers after that(b) / rally but the people(c) / belonging to the community(d)
(a) ABCD (b) BCDA (c) CABD
(d) DACB (e) None of the above

88. He also directed the department/ to develop the new schools as model(a) / completion of construction work(b) / construction technology for early(c) / institutions and engage modern(d)
(a) ADCB (b) ABCD (c) DACB
(d) CADB (e) None of the above

89. The U.S. is a/ to its being an open society(a) / nation of immigrants(b) / in the present global order(c) / and owes its predominant position(d) .
(a) ADCB (b) ABCD (c) BDCA
(d) CADB (e) None of the above

Directions (90-95): Read the following passage carefully and answer the questions given below it. Certain words are given in bold to help you locate them while answering some of the questions.

Have you heard that the economy is like a car? It's the most popular **analogy** in financial reporting and political discourse. The American people are repeatedly told by financial pundits and politicians that consumption is an 'engine' that 'drives' economic growth because it makes up 70% of GDP. One notable Nobel-winning economics pundit with a penchant for bizarre growth theories even recently noted that an economy can be 'based on purchases of yachts, luxury cars, and the services of personal trainers and celebrity chefs.' Conversely, other economists including Nobel-winner Joseph Stiglitz claim that our economy is stuck in 'first gear' due to inequality: too much income is concentrated among too few rich people who tend to save larger share of their income and thus have a lower 'marginal propensity to consume'. The Keynesian message is clear: if you want to put the economic pedal to the metal, get out there and consume!

Not so fast, Speed Racer. The systematic failure by Keynesian economists and pundits to distinguish between consuming and producing value is the single most damaging fallacy in popular economic thinking. If the economy were a car, consumer preferences would surely be the steering wheel, but real savings and investment would be the engine that drives it forward.

Economic growth (booms) and declines (bust) have always been led by changes in business and durable goods investment, while final consumer goods spending has been relatively stable through the business cycle. Booms and busts in financial markets, heavy industry and housing have always been leading indicators of recession and recovery.

As John Stuart Mill put it two centuries ago, 'the demand for commodities is not the demand for labor.' Consumer demand does not necessarily translate into increased employment. That's because 'consumers' don't employ people. Businesses do. Since new hires are a risky and costly investment with **unknown** future returns, employers must rely on their expectations about the future and weigh those decision very carefully. As economic historian Robert Higgs' pioneering work on the Great Depression suggests, increased uncertainty can depress job growth even in the face of booming consumption. As recent years have demonstrated, consumer demand that appears to be driven by temporary or unsustainable policies is unlikely to induce businesses to hire.

90. Choose the word which is **MOST SMILAR** to the word given in passage
UNKNOWN
(a) Recognize (b) Perceived
(c) Unpredictable (d) Unruly (e) Uncanny

91. Which of the following is the most suitable title for the passage above?
(a) Recession and Recovery
(b) Consumer: The driving force for Economy
(c) Economy: a Distant Dream?
(d) Is Consumption necessary for economic Growth?
(e) None of the Above

92. In the statement "**consumer preferences would surely be the steering wheel, but real savings and investment would be the engine that drives it forward",** what can we infer from the line **"consumer preferences would surely be the steering wheel"?**
(a) Consumer likings regulate the economy individually.
(b) If you want to regulate the economy, consumption is the only force.
(c) The Penchant of the consumers controls the economy.
(d) The consumer preferences are not at par with savings and economy in driving the economy.
(e) None of the Above

93. Which of the following statements is/are correct in context with the passage?
(a) Economists fail to distinguish between consuming and producing value and form a mistaken belief.
(b) Economic growth and declines have always been led by changes in business and durable goods investment.
(c) Income distribution is evenly distributed among the rich and is compatible with the tendency to consume.
(d) Only (a)
(e) Both (a) and (b)

94. Which of the following is/are likely to induce businesses to hire?
(a) Consumer Demand
(b) Consumer Spending
(c) Increased certainty in future returns.
(d) Makeshift policies
(e) Both (b) and (c)

95. Choose the word which is **MOST OPPOSITE** to the word given in passage
ANALOGY
(a) Similarity (b) narrative (c) Contrast
(d) Reciprocate (e) Variance

Directions (96-100): In the following questions two columns are given containing three sentences/phrases each. In first column, sentences/phrases are A, B and C and in the second column the sentences/phrases are D, E and F. A sentence/phrase from the first column may or may not connect with another sentence/phrase from the second column to make a grammatically and contextually correct sentence. Each question has five options, four of which display the sequence(s) in which the sentences/phrases can be joined to form a grammatically and contextually correct sentence. If none of the options given forms a correct sentence after combination, mark (e) , i.e. "None of these" as your answer.

96.

Column (1):		Column (2):	
(A)	As the head of the family, he ensures that	(D)	he runs around like a headless chicken
(B)	Ravi is such a disorganized fellow that	(E)	he succeeds to make everyone laugh
(C)	The boy next door nags his parents because	(F)	he goes out and earns a living for his family

(a) C-E and B-F (b) A-F (c) B-E
(d) A-D (e) None of these

97.

Column (1):		Column (2):	
(A)	Some rich guy from Boston	(D)	are losing an argument
(B)	People tend to raise their voices when they	(E)	all were fatally injured
(C)	As soon as the herd heard the gunshots, they	(F)	just bought the house next to mine

(a) C-F (b) A-D (c) B-E
(d) B-D (e) None of these

98.

Column (1):		Column (2):	
(A)	Tom always drinks at least	(D)	he might still be alive.
(B)	If he had taken his doctor's advice	(E)	we went on a picnic together.
(C)	I can still remember the time when	(F)	three cups of coffee in the morning.

(a) C-E (b) B-F (c) A-D
(d) C-F (e) None of these

99.

Column (1):		Column (2):	
(A)	It seems like yesterday, but it's actually	(D)	whether or not you are happy.
(B)	I can't believe Vijay is still talking about	(E)	nearly ten years since we first met.
(C)	The only thing that really matters is	(F)	what happens two years ago.

(a) A-D (b) B-E (c) C-E
(d) A-F (e) None of these

100.

Column (1):		Column (2):	
(A)	After school, Jack usually sticks around as long as	(D)	had gone wrong with the microwave.
(B)	We're planning on doing the sights	(E)	he can because he doesn't want to go home.
(C)	Even the repairman couldn't figure out what	(F)	of the city tomorrow morning.

(a) A-F and B-D (b) B-E and C-F
(c) B-F and C-D (d) A-D and C-E
(e) None of these

Solutions

REASONING ABILITY

Directions (1-4):

Person	Country
A	S
B	Q
C	T
D	W
E	P
F	V
G	R
H	U

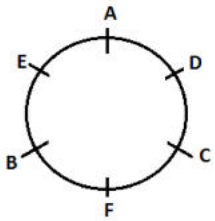
1. (d); 2. (b); 3. (e);

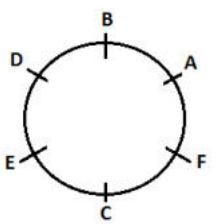
4. (a);

Directions (5-7):

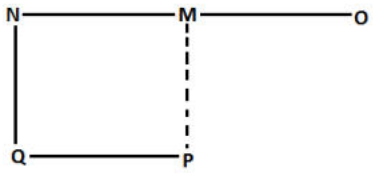
5. (b); Seeking is coded as 'ki'.

6. (c); From Statement I From Statement II

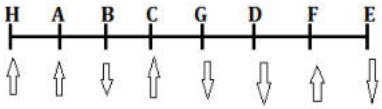




7. (a); From Statement I



Direction (8-12):



8. (a); 9. (e); 10. (a);

11. (c); 12. (e);

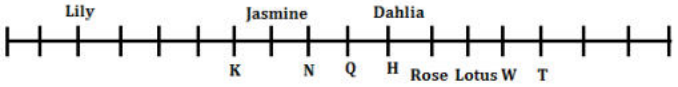
Direction (13-17):

Coming/from	689/384
the	543
village	721
innocent	962
people	827
Heat/for	235/475

13. (a); 14. (b); 15. (c);

16. (d); 17. (a);

Direction (18-22):

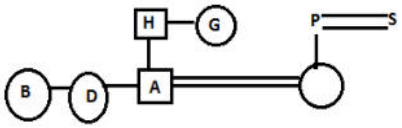


18. (b); 19. (c); 20. (a);

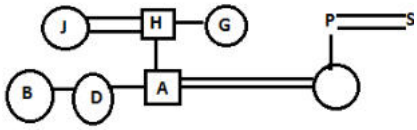
21. (b); 22. (b);

Direction (23-25):

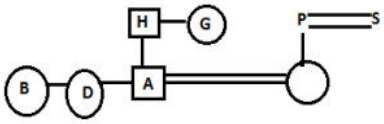
23. (d);



24. (c);



25. (b);



Direction (26-30):

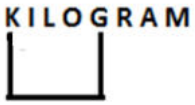
Floors	Flat-1	Flat-2
5	J	G
4	A	D
3	H	I
2	E	B
1	C	F

26. (c); 27. (d); 28. (b);

29. (c); 30. (a);

31. (b); JP-112

32. (b);



33. (c); 8541

Direction (34-35):

E>F>B(132)>C>D>A(69)

34. (a);

35. (d);

QUANTITATIVE APTITUDE

36. (c); Required difference = 25 + 75 − 45 − 50
= 5

37. (a); Total number of pens sold on Saturday
= 30 × 1.4 = 42
Total number of pens sold on Friday and Saturday together = 50 + 42 = 92

38. (d); Total number of pens sold on Sunday
$= \frac{75}{125} \times 100 = 60$

39. (b); Blue ink pen sold on Thursday = $45 \times \frac{20}{100}$
= 9
Red ink pen sold on Thursday
$= (45 - 9) \times \frac{25}{100} = 9$
Black ink pen sold on Thursday
$= (45 - 9) \times \frac{75}{100} = 27$
Total number of blue and black ink pen sold on Thursday = 9 + 27 = 36

40. (e); Total number of non-defective pens sold on Tuesday = $\frac{75}{15} \times 8 = 40$

41. (c); Quantity I. $x^2 + x - 6 = 0$
$x^2 + 3x - 2x - 6 = 0$
$x(x + 3) - 2(x + 3) = 0$
$(x + 3)(x - 2) = 0$
$x = -3, 2$
Quantity II. $y^2 + 7y + 12 = 0$
$y^2 + 4y + 3y + 12 = 0$
$(y + 4)(y + 3) = 0$
$y = -4, -3$
Quantity I ≥ Quantity II

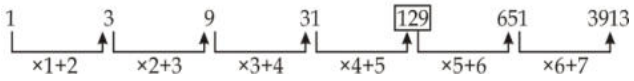
42. (b); A's efficiency = 5
B's efficiency = 4
Let total work = 60
Quantity I : A can do $\frac{5}{6}$ of work in → $\frac{50}{5}$ = 10 d
Quantity II : B can do $\frac{4}{5}$ of work in → $\frac{48}{4}$
= 12 d
Quantity II > Quantity I

43. (a); Let numbers be x, x+2, x+4 , x+6, x+8, x+10, x+12, x+14
Quantity I → x +2 + x + 14 = 2x +16
Quantity II → x+4+ x+ 10 = 2x + 14
Quantity I > Quantity II

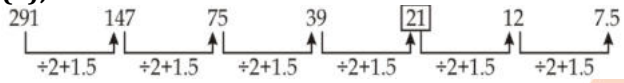
44. (b); SP = 1500
Let, MP = x
Quantity I = 550
Quantity II :
$x \times \frac{7}{8} = 1500$
$x = \frac{1500 \times 8}{7}$
$x = \frac{12000}{7}$
Quantity II > Quantity I

45. (e); Quantity I :
Let speed of current = x
speed of boat = x + 5x
downstream speed = 7x
$\frac{63}{7x} = 3 \quad \Rightarrow \quad x = 3$
Upstream speed = 6x – x = 5x = 15 km/hr
Quantity I = Quantity II

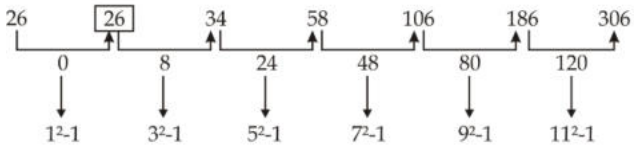
46. (c);



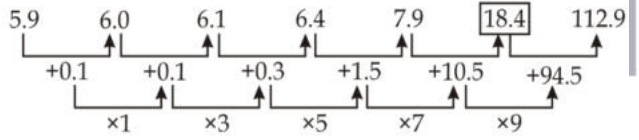
47. (a);



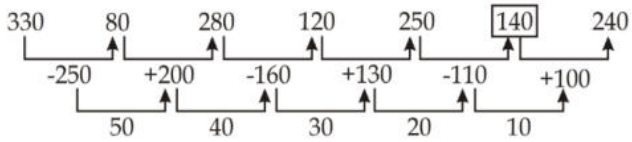
48. (e);



49. (d);



50. (b);



51. (d); Volume of cylinder (s) = $\pi r^2 h$
(r → radius)
(h → height)
Volume of cone (c) = $\frac{1}{3}\pi R^2 H$
(R → radius)
(H → height)
h = H = 10 cm
ATQ,
$\pi r^2 h + \frac{1}{3}\pi R^2 h = 2190\pi$
$\pi \times 10 \left[r^2 + \frac{1}{3} \times 15 \times 15\right] = 2190\pi$
r =12
$\therefore \frac{r}{R} = \frac{12}{15} = 4 : 5$

52. (c); Atq,
$\frac{X}{X+16} = \frac{1}{3}$
3X = X + 16
X = 8
∴ sum of red & blue balls = 8 + 6 = 14

53. (a); Let present age of A be x yrs
& present age of B be y yrs.
ATQ,
x + y = 88 + 12
x + y = 100 ... (i)
x – 18 = y – 6
x – y = 12 ... (ii)
solving (i) & (ii)
x = 56
∴ age of A 2 year hence = 58 yrs

54. (b); Let speed of train A be S
S × 18 = 360
S = 20 m/s
A : B = 4 : 5
A : B = 4 : 5
Speed of B = 25 m/s
Length of train B = 25 × 12 = 300 m

55. (b); Total numbers of ways → 7!
Favorable numbers of ways → 5! × 3!
Probability → $\frac{5! \times 3!}{7!} = \frac{1}{7}$

56. (d); $2^{?} = 32.01 \div 128.01 \times 1023.99 \div 7.99$
$2^{?} \approx \frac{32}{128} \times \frac{1024}{8}$
$2^{?} \approx 32$
$2^{?} \approx 2^5$
$? \approx 5$

57. (a); $\frac{339.99}{?} = \sqrt{143.99} + \sqrt{64.01}$
$\frac{340}{?} \approx \sqrt{144} + \sqrt{64}$
$\frac{340}{?} \approx 12 + 8$
$\frac{340}{20} \approx ?$
$17 \approx ?$

58. (e); 34.02% of 550.09 ÷ ? = 297.07 ÷ $\sqrt{728.95}$
$\frac{34 \times 550}{100} \div ? \approx 297 \div \sqrt{729}$
$\frac{187}{?} \approx \frac{297}{27}$
$? \approx 17$

59. (a); (? ÷ 9.97) × 12.08 ≈20.12% of 1319.97
$(? \div 10) \times 12 \approx \frac{20 \times 1320}{100}$
$? \approx \frac{264}{12} \times 10 \approx 220$

60. (d); ? % of 179.99 =

$\sqrt{(24.02)^2 + (17.98)^2 + 60.01\% \text{ of } 659.98}$

? % of $180 \approx \sqrt{(24)^2 + (18)^2 + 60\% \text{ of } 660}$

$\frac{?}{100} \times 180 \approx \sqrt{576 + 324 + 396}$

$\frac{?}{100} \times 180 \approx \sqrt{1296}$

$? \approx \frac{36}{180} \times 100$

$? \approx 20$

61. (c); Total number of workers in company A and C together

$= 900 \times \frac{32}{100} + 900 \times \frac{24}{100}$

$= 288 + 216 = 504$

Total number of officers in company A and C together

$= 900 \times \frac{32}{100} \times \frac{1}{16} + 900 \times \frac{24}{100} \times \frac{1}{12}$

$= 18 + 18 = 36$

$Required\ Ratio = \frac{504}{36} = \frac{14}{1}$

62. (e); Total number of employees in company B

$= 900 \times \frac{44}{100} \times \frac{19}{18} = 418$

Total number of employees in company C

$= 900 \times \frac{24}{100} \times \frac{13}{12} = 234$

Required difference = $418 - 234 = 184$

63. (a); Total number of officers in Company 'A'

$= 900 \times \frac{32}{100} \times \frac{1}{16} = 18$

Total number of officers in Company 'B'

$= 900 \times \frac{44}{100} \times \frac{1}{18} = 22$

Required difference = $22 - 18 = 4$

64. (b); Total number of officers in company C

$= 900 \times \frac{24}{100} \times \frac{1}{12} = 18$

Total number of workers in company C

$= 900 \times \frac{24}{100} = 216$

Total number of employees in company D

$= 216 \times 1.25 + 18 \times 1.5 = 270 + 27$

$= 297$

65. (d); Required difference = $\frac{900}{100} \times (44 + 24 - 32)$

$= 9 \times 36 = 324$

Solution (66-70)

Ratio of profit share of A, B and C is scheme S_1

$80000 \times 2 : 30000 \times 3 : 50000 \times 5$

16 : 9 : 25

Profit share of A from Scheme $S_1 = \frac{16}{50} \times 200{,}000$

$= 64000$

Profit share of B from scheme $S_1 = \frac{9}{50} \times 200{,}000$

$= 36000$

Profit share of C from scheme $S_1 = \frac{25}{50} \times 20{,}000$

$= 100{,}000$

Ratio of profit share of A and C in scheme S2

$30{,}000 \times 4 : 10{,}000 \times 3$

12 : 3

Profit share of A in scheme $S_2 = \frac{12}{15} \times 90000$

$= 72000$

Profit share of C in scheme $S_2 = \frac{3}{15} \times 90{,}000$

66. (d); Required ratio

$= (36000 + 10000) : 100{,}000$

$= 46 : 100 = 23 : 50$

67. (e); Required % $= \frac{64000}{18000} \times 100 = \frac{3200}{9}\%$

$= 355\frac{5}{9}\%$

68. (a); Total investment of A $= 80{,}000 + 30{,}000$

$= 110{,}000$

Total profit of A = 64000 + 72000 = 136000

Equivalent rate of Interest for 2 year at CI

$= 20\% + 20\% + \frac{20 \times 20}{100} = 44\%$

Required CI $= \frac{44}{100}(136000 + 110000)$

$= 108240$

69. (a); Required average $= \frac{64000 + 18000}{2} = 41000$

70. (c); $\frac{80000 \times R \times 3}{100} - 30000 \times \left(\frac{R+5}{100}\right) = 30{,}000$

2400R – 300R – 1500 = 30000

8R – R – 5 = 100

7R = 105

R = 15%

ENGLISH LANGUAGE

71. (d); The most appropriate phrase to replace the phrase given in bold is "is very different from". In the given sentence, 'than' should be replaced with 'from' because 'different' is followed by 'from'. Also keep in mind that, 'than' is used after 'different', but only in the cases where 'different' is followed by a noun. For example, I read a different novel than this. Since option (d) is in the precise grammatical syntax, it becomes the most suitable answer choice.

72. (b); The most appropriate phrase to replace the phrase given in bold is "statistics with regard to". It is to be noted that 'Statistics', when used as a subject, always takes a singular verb. For example, Statistics is not an easy subject. But, whenever 'statistics' denotes some statistical facts or data, the very following it is always plural, which is the case here. Since option (b) is in the precise grammatical syntax, it becomes the most suitable answer choice.

73. (e); The phrase given in sentence is grammatically correct and does not require any replacement. Hence, option (e) i.e. "No replacement required" is the correct answer.

74. (c); The most appropriate phrase to replace the phrase given in bold is "I smelled". It is to be noted that after 'As soon as, As long as, So long as', we don't use 'than/then'. Since option (c) is in the precise grammatical syntax, it becomes the most suitable answer choice.

75. (a); The most appropriate phrase to replace the phrase given in bold is "he was able". It is to be noted that 'Although/Though' is followed by 'yet' and not 'but/and/or/else'. And in writing, many a times, 'yet' is replaced by a 'comma', which is the case here. Since option (a) is in the precise grammatical syntax, it becomes the most suitable answer choice.

76. (c); The most appropriate phrase to replace the phrase given in bold is "denied that they are". It is to be noted that 'not' will not be used after 'deny' because deny already means refuse to admit. Since option (c) is in the precise grammatical syntax, it becomes the most suitable answer choice.

77. (b); The most appropriate phrase to replace the phrase given in bold is "who did not love". It is to be noted that after 'did' we always use the first form of the verb i.e. V1. Since option (b) is in the precise grammatical syntax, it becomes the most suitable answer choice.

78. (d); The most appropriate phrase to replace the phrase given in bold is "is exceptionally". It is to be noted that 'good' is an adjective, so 'exceptional' should be replaced by 'exceptionally'. 'Exceptional' is itself an adjective and we all know that an adjective never defines another adjective, but an adverb does. Since option (d) is in the precise grammatical syntax, it becomes the most suitable answer choice.

79. (a); (i) When we see ourselves repeating our ordinary routine, we realize how much wealth surrounds our life.

80. (e); (i) As there is a growing influence of the Indian Diaspora on Capitol Hill, Trump will certainly see the advantages of doing business with India.
(ii) The growing influence of the Indian Diaspora on Capitol Hill will certainly allow Trump to see the advantages of doing business with India.
(iii) With the growing influence of the Indian Diaspora on Capitol Hill, Trump will certainly see the advantages of doing business with India.

81. (c); (i) As there was no democracy in British India, the rulers could take bold decisions fearlessly without bothering about repercussions.
(ii) Since there was no democracy in British India, the rulers could take bold decisions fearlessly without bothering about repercussions.

82. (b); Option (b) is correct because while indicates a contrast and because of the given requirement of the statement it cannot start the sentence.

83. (d); Both (i) and (ii) are correct
(i) To further explore the causes and effects of global warming , scientists build climate models—computer simulations of the climate system.
(ii) Scientists are building climate models—computer simulations of the climate system to further explore the causes and effects of global warming and to predict future warming.

84. (c); **BDCA**; (The apex court had ordered that the deadline be extended till the five-judge constitution bench delivers its judgment on petitions challenging the validity of the biometric scheme and the enabling law)

85. (b); **DABC**; (Repealing the law that safeguards the indigenous people would open the floodgates of poaching and it would lead to marginalisation of the indigenous people)

86. (d); **CADB**; (My thoughts are with the families of those who have lost their loved ones in this unfortunate accident. I pray for the speedy recovery of the injured)

87. (b); **BCDA**; (Several people became leaders and Ministers after that rally but the people belonging to the community remained where they were)

88. (a); **ADCB**; (He also directed the department to develop the new schools as model institutions and engage modern construction technology for early completion of construction work)

89. (c); Option (c) **BDCA** is the correct choice for the given question
The U.S. is a nation of immigrants and owes its predominant position in the present global order to its being an open society.

90. (e); Unknown: not known or familiar.
Uncanny: strange or mysterious

91. (d); The most appropriate title for the passage above is "Is Consumption necessary for economic Growth?"

92. (c); The meaning of the line above is that consumer preferences control the economy but savings and investment are the push to drive it forward. Hence option c is the correct choice here.

93. (e); Both statements (a) and (b) are correct. Refer the following lines
Option(a) :The systematic failure by Keynesian economists and pundits to distinguish between consuming and producing value is the single most damaging fallacy in popular economic thinking.
Option(b) : Economic growth (booms) and declines (bust) have always been led by changes in business and durable goods investment, while final consumer goods spending has been relatively stable through the business cycle.

94. (c); Option (c) is the correct choice. Refer last paragraph of the passage, "increased uncertainty can depress job growth even"

95. (e); Option (e) is the correct choice
Analogy means a comparison between one thing and another, typically for the purpose of explanation or clarification.
Variance means the fact or quality of being different, divergent, or inconsistent.

96. (b); Out of all the given options, only combination of sentences (a) and (F) makes a grammatically and contextually correct sentence. Hence, option (b) is the correct answer.

97. (d); Out of all the given options, only combination of sentences (b) and (d) makes a grammatically and contextually correct sentence. Hence, option (d) is the correct answer.

98. (a); Out of all the given options, only combination of sentences (c) and (e) makes a grammatically and contextually correct sentence. Hence, option (a) is the correct answer.

99. (e); Out of all the given options, none of the combinations of sentences makes a grammatically and contextually correct sentence. Hence, option (e) is the correct answer.

100. (c); Out of all the given options, combination of sentences (b) and (F) together as well as combination of sentences (c) and (d) together makes a grammatically and contextually correct sentence. Hence, option (c) is the correct answer.

Mock 03

SBI PO Prelims 2017

REASONING ABILITY

Directions (1-5): Study the following information carefully and answer the given questions.

In an apartment, 8 persons i.e. D, E, F, G, H, I, J and K live on different floors of 8 storey-building but not necessarily in the same order. The lowermost floor of the building is numbered 1 and the topmost floor of the building is numbered 8. They are of different stream of engineering i.e. Chemical engineering, Instrumentation Engineering, Software engineering, Aeronautical Engineering, Mechanical Engineering, Electrical Engineering, Automobile Engineering, and Civil Engineering.

The one who lives on fourth floor is specialized in Mechanical engineering. D lives on odd numbered floor but above 3rd floor. The number of person between D and Electrical engineering specialized person is same as number of person between D and I. The one who is specialized in Instrumentation Engineering lives on lower most floor. K lives on an even numbered floor and he is specialized in Automobile engineering. There are two floors between E and H and E lives above to H. E is specialized in Aeronautical Engineering. J lives just above the one who is specialized in Aeronautical Engineering. The number of floors between the one who is specialized in Aeronautical Engineering and Mechanical Engineering is two. The one who is specialized in Civil Engineering lives on odd numbered floor. The number of floors between the one who is specialized in Chemical engineering and J is four. The one who is specialized in Aeronautical engineering lives on odd numbered floor. The number of floors between the one who is specialized in Civil engineering and the floor on which F lives is same as the number of floors between F and G. I lives below the floor on which D lives.

1. How many persons live between the person who is specialized in Chemical engineering and the one who is specialized in Electrical Engineering?
(a) Six (b) One (c) Four
(d) Two (e) None of these

2. J is specialized in which of the following stream of engineering?
(a) Aeronautical Engineering
(b) Electrical Engineering
(c) Civil Engineering
(d) Instrumentation Engineering
(e) Mechanical Engineering

3. Four of the following five are alike in a certain way and hence they form a group. Which one of the following does not belong to that group?
(a) J (b) K (c) H
(d) I (e) G

4. D lives on which floor?
(a) 1 (b) 3 (c) 4
(d) 5 (e) 7

5. G is related to Mechanical Engineering, in the same way as F is related to Automobile Engineering. Then, which of the following is H related to? (Following the same pattern)
(a) Mechanical Engineering
(b) Electrical Engineering
(c) Civil Engineering
(d) Instrumentation Engineering
(e) Aeronautical Engineering

6. Which of the following symbols should replace the sign ($) and (#) in the given expression in order to make the expressions P>C and C ≤ B definitely true?
'A > B ≥ R $ C < R ≤ Z = M # P ≥ X'
(a) ≥, > (b) ≥, ≤ (c) >, =
(d) =, ≥ (e) <, ≤

7. Five persons namely A, B, C, D and E are going to the school in different days of the week, starting from Monday to Friday. Two persons are going between C and B. C is going before Wednesday. D is going to the school immediate after E. A is not going on Friday. Then who among the following person is going to school on Wednesday?
(a) B (b) C (c) D
(d) E (e) A

Directions (8-12): Study the following information carefully and answer the question given below:
Eight people viz. A, B, C, D, P, Q, R and S are sitting in a straight line. They all are facing north. Each one of them has a different age i.e. 14, 16, 17, 19, 21, 23, 26 and 31 year, but not necessarily in the same order.
B sits at one of the extreme end of the row. There are three persons sitting between C and Q. Q is neither 14 nor 19yr old. There are two persons sitting between D and the person whose age is 23yr. Neither Q nor D is the oldest person. Age difference of immediate neighbours of

D is 5yr. A sits right to the R, but not immediate right. There are three persons sitting between B and the one whose age is 16yr. The one whose age is 19yr sits third to the right of C. R sits to the right of B. Q sits second to the right of the person whose age is 23yr. P sits immediate left of the person whose age is 14yr. Q is not youngest person. The one, whose age is 31yr in not immediate neighbour of the youngest person, C is not the fourth oldest person.

8. Who sits second to the right of D?
(a) A (b) S (c) P
(d) R (e) None of these

9. How many persons sits between the person whose age is 31yr and S?
(a) Four (b) Five (c) Three
(d) One (e) None of these

10. Who among the following person is 26yr old?
(a) R (b) D (c) C
(d) S (e) None of these

11. If P is related to 16yr in the same way as B is related to 26yr, then which of the following is R related to, following the same pattern?
(a) 19yr (b) 17yr (c) 21yr
(d) 31yr (e) None of these

12. What is the age difference of A's immediate neighbours?
(a) Three (b) Seven (c) Five
(d) Six (e) None of these

13. Q is the daughter of A. J is the brother of Q. J is the son of R. J is the father of S. If it is given that A is mother of Q, then what is the relation of R with respect to S?
(a) Father (b) Mother-in-law
(c) Mother (d) Father-in-law
(e) Grand father

Directions (14-18): Study the following information carefully and answer the question given below:
There are seven persons P, Q, R, S, T, U and V who were born on the same day of the same month of different year i.e. 1984, 1946, 1967, 1972, 1982, 1989 and 1992 but not necessarily in the same order.
Note: Their age are considered as on the same month and day of 2017 as their date of births.
The difference between the ages of Q and R is twice the square root of the age of one of the any seven persons. Difference between the ages of R and S is the same as the number obtained by dividing ages of any two among the other five persons. Age of P is greatest amongst those whose age is a multiple of five. T is older than V who is not the youngest. Q is not youngest person.

14. Who amongst the following person is the oldest?
(a) P (b) V (c) U
(d) T (e) None of these

15. What is the age of R?
(a) 33 years (b) 35 years (c) 25 years
(d) 45 years (e) 50 years

16. How many persons are younger than U?
(a) One (b) Two (c) Three
(d) Four (e) No one

17. What is the age of S?
(a) 45 years (b) 35 years (c) 33 years
(d) 50 years (e) 28 years

18. Who was born on 1989?
(a) V (b) U (c) T
(d) P (e) Q

19. In a certain code language 'economics growth registered' is written as 've jo qi', 'growth is expected' is written as 'qi lo mn', and 'registered expected number' is written as 'lo ve pr' ,then what is the code for "economic" ?
(a) lo (b)pr (c) qi
(d) ve (e) jo

20. If 2 is subtracted from each odd digit in the number 7493652 and 3 is added to each even digit in number then which of the following digit is repeated in the new number so obtained?
(a) 9, 4 (b) 6, 5 (c) 5, 9
(d) 5, 4 (e) 5, 7

Directions (21-22): Study the following information carefully and answer the question given below:
There are four boxes i.e. J, K, L and M in which four types of fruits are stored. Fruits are Litchi, Apple,
Grapes and Mango. Boxes are arranged in such a manner from top to bottom.
There are two boxes between K and L. The box in which grapes are stored is above L, but not immediate above. The box in which Apple is stored is immediate below M, but not stored in box L. Litchi box is above the Mango box, but not immediate above Apple box.

21. In which of the following box, Litchi is stored?
(a) J (b) M (c) K
(d) L (e) Either (a) or (b)

22. Which of the following fruit is stored in second lowest Box?
(a) Grapes (b) Apple (c) Mango
(d) Litchi (e) Can't be determined

Directions (23-27): Study the following information carefully and answer the question given below:
Eight persons M, N, O, V, W, X, Y and Z attend seminars on different months of the year viz. March, June, October and November, such that not more than two persons attend their seminars in each of the months. Seminars can be held on either 10th or 27th day of the month. No two seminars can be held on the same day. W and N attend the seminars on the same month. There are three seminars between the seminars of X and O. W does not attend his seminar in November. Z attends his seminar immediately after N. V attends his seminar in the month of November. The number of persons who attend their seminars between the seminars of Y and Z respectively is the same as the number of persons who attend their seminars between the seminars of N and V respectively. X does not attend the seminar on October. W attends his seminar before N. Y does not attend his seminar on November.

23. M attends his seminar on which of the following dates?
(a) 10th October (b) 27th November
(c) 10th November (d) 10th March
(e) None of these

24. Which of the following persons attends his seminar on 27th March?
(a) W (b) N (c) M
(d) X (e) None of these

25. How many persons attend the seminar after W?
(a) 5 (b) 4 (c) 6
(d) 3 (e) None of these

26. Who among the following persons attends the seminar on 10th October?
(a) W (b) M (c) V
(d) Z (e) None of these

27. How many persons attended seminar after V?
(a) 5 (b) 4 (c) 7
(d) No one (e) None of these

Directions (28-29): Study the following information and answer the given questions:
There are six family members A, B, C, D, E and F and all of them are of different age. A is younger than only one person. E is older than B and D but not as old as A. D is older than only one person. F is youngest in the family. The age of D is 25 year and the age of person who is second oldest is 40 year.

28. Who is oldest in the family?
(a) A (b) B (c) D
(d) E (e) C

29. What is the possible age of B?
(a) 42 years (b) 20 years (c) 55 years
(d) 19 years (e) 30 years

30. Which of the following statement shows 'A≥R' and 'B<C' holds definitely true?
(a) B ≤ C = A ≥ K = R (b) C=K>B<R≥A
(c) C>B>A≥K=R (d) B=K<C<R=A
(e) None of these

Directions (31-33): In the given questions, assuming the given statements to be true. Find which of the given two conclusions numbered I, II is/are definitely true and give your answer accordingly.

31. **Statement:** M > U > L ≤ N; L ≥ Y > A
Conclusions: I. Y < N II. Y = N
(a) Both I and II are true
(b) Only II
(c) Only I is true.
(d) Either I or II is true.
(e) None is true.

32. **Statement:** J ≥ A > D = E; L < A < M
Conclusions: I. M < J II. J > L
(a) Only II is true.
(b) Either I or II are true.
(c) Both I and II are true
(d) Only I is true.
(e) None is true.

33. **Statement:** M≤K>L=Y ; P≤T>M
Conclusions: I. P>Y II. T<L
(a) Only II is true.
(b) Only I
(c) Either I or II are true.
(d) Both I and II are true
(e) None is true

34. In a vertical row 13 persons are sitting. A is seventh from the beginning and two persons sits between G and A. Persons between A and L is same as persons between G and Q. Then what is the position of Q from the beginning?
(a) Fourth (b) Eight (c) Sixth
(d) Ninth (e) Can't be determined

35. A man walks 12m east from point A and reaches point B. From point B he takes left turn and walks 4m and then he takes right turn and walked 6m and again he takes right turn and walks 7m and again takes right turn and reaches point M. If it is given that point B is in north from point M, then what is the distance between B and M?
(a) 7m (b) 6m (c) 5m
(d) 4m (e) 3m

QUANTITATIVE APTITUDE

36. Rs. 1800 is given at 20% per annum SI while Rs (1800 - P) is given at 30% per annum CI. If the difference between both interests at the end of two years is Rs 315. Find P.
(a) Rs. 200 (b) Rs. 300 (c) Rs. 400
(d) Rs. 100 (e) None of these

37. Three partners A , B and C invested their amounts in ratio 7:5:3. At the end of six months, A withdraws his amount such that his total investment will be equal to C's initial investment. If C' share in annual Profit is Rs. 3600. A's annual profit will be ?
(a) Rs. 6000 (b) Rs. 7000 (c) Rs. 4500
(d) Rs. 9000 (e) None of these

38. A and B sold two articles at 25% profit and 40% profit respectively. If total profit is Rs. 178 and the cost price of A is Rs 120 less than B. find the CP of B.
(a) Rs. 310 (b) Rs. 370 (c) Rs. 320
(d) Rs. 430 (e) None of these

39. B's age is 10 years older than A. If the ratio of B's age 11 years hence and C's present age is 3:2. At present C's age is thrice A's age. What will be the age of C after 7 years?
(a) 18 years. (b) 23 years. (c) 28 years.
(d) 25 years. (e) None of these

40. If the ratio of curved surface area to the volume of cylinder is 4:7 while the ratio of diameter to the height of cylinder is 14:5. Find the total surface area of cylinder.?
(a) 140 units (b) 130 units (c) 123 units
(d) 132 units (e) None of these

41. A bag contains 25 cards with numbered 1, 2, 3,……, 25. Two cards are picked at random (one after another and without replacement). Find the probability that the sum of numbers of both cards are odd?
(a) $\frac{12}{50}$ (b) $\frac{13}{25}$ (c) $\frac{13}{50}$
(d) $\frac{13}{27}$ (e) None of these

42. If time taken to cover ' D-11' km upstream is four times the time taken to cover D km downstream. If ratio of speed of boat in still water to the speed of water current is 9:7. And the time taken to cover 'D-2' km in upstream is 2 hrs. what will be the speed of boat in still water?
(a) 30 kmph (b) 20 kmph (c) 45 kmph
(d) 35 kmph (e) None of these

43. Time taken to complete a work by A alone is 100% more than the time taken by both A and B to complete the work. B is thrice as efficient as C. B and C together take 12 days to complete the same work. How many days A will take to complete the work alone?
(a) 32 days (b) 16 days (c) 24 days
(d) 20 days (e) None of these

44. Sashi spends 32% of his income in various expenses. Of the remaining, she spends one – fourth on her brother while 9/17 on her sister and remaining keep as savings. If the difference between her money spending on brother and sister is Rs. 3800 . What is Shashi's savings?
(a) Rs. 3000 (b) Rs. 2500 (c) Rs. 4000
(d) Rs. 3400 (e) None of these

45. If two is subtracted to the numerator while 3 is added to the denominator, ratio becomes 3 : 2. While if 7 is added to the denominator while 4 is subtracted form the numerator, ratio becomes 5:3. What is the fraction?
(a) $\frac{23}{54}$ (b) $\frac{-23}{64}$ (c) $\frac{76}{55}$
(d) $\frac{-23}{55}$ (e) None of these

Directions (46-50): What should come in place of the question mark (?) in the following number series.

46. 12, 7, 8, 13, 27, ?
(a) 75 (b) 76 (c) 60
(d) 65 (e) 68.5

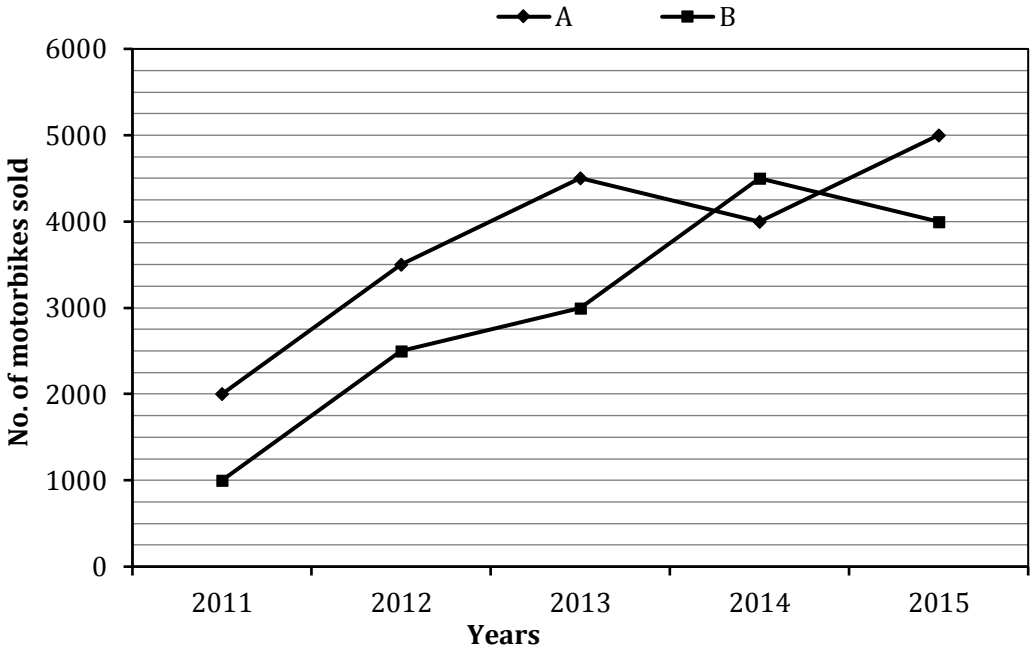
47. 15, 24, 49, 98, 179, ?
(a) 310 (b) 300 (c) 305
(d) 315 (e) None of these

48. 5, 6, 14, 45, ? , 925
(a) 184 (b) 243 (c) 234
(d) 232 (e) None of these

49. 9, 11, 22, 51, 107, ?
(a) 195 (b) 210 (c) 200
(d) 199 (e) None of these

50. 67, 75, 59, 91, 27, ?
(a) 180 (b) 155 (c) 170
(d) 120 (e) None of these

Directions (51-55): Read the following line graph and answer the following questions given below it –
There are two motorbike manufacturing companies A and B. The sale of motorbikes by these two different companies in different years is given in the graph below.



51. What is the ratio of total sales of company B in 2012 and that of company A in 2014 together to the total sales of company A in 2011 and that of company B in 2015 together?
(a) 13:12 (b) 11:9 (c) 12:7
(d) 13:10 (e) None of these

52. What is the difference between the sales of company A in 2016 and that of company B in 2016 if the sales of company A and B increase by 20% and 10% respectively in 2016 as compared to 2015?
(a) 1700 (b) 1600 (c) 1800
(d) 2100 (e) None of these

53. The total sales of both companies in 2015 is what percent more than the total sales of both the companies in 2011?
(a) 280% (b) 180% (c) 200%
(d) 250% (e) None of these

54. Find the difference between the total sales of company A from 2012 to 2014 and that of company B from 2013 to 2015?
(a) 750 (b) 500 (c) 600
(d) 400 (e) None of these

55. If the sales of company A increases by 33.33% in 2011 over its sales in 2010, then find the percent increase in the sales of company A in 2015 with respect to the sales in 2010?(up to two decimal places)
(a) 233.33% (b) 210.12% (c) 333.33%
(d) 272.32% (e) None of these

Directions (56-60): Read the following table and answer the following question :
Total number of voters in different districts and Percentage of male out of these voters are given.

District	Total voters (Male and Female)	Percentage of male out of total voters
A	350	30%
B	400	54%
C	370	50%
D	250	46%
E	300	45%
F	625	32%

56. Total number of male voters from district A and B together are how much more/less than total number of female voters from district E and D together?
(a) 21 (b) 32 (c) 25
(d) 31 (e) None of these

57. The average of total voters from district B, C and D together are approximately what percent less/more than the no. of male of voters from districts D,E and F together?
(a) 33.33% (b) 24.44% (c) 66.66%
(d) 16.66% (e) none of these

58. Find the ratio of the male voters from district D and E together to the female voters form district C, E and F together?
(a) 10 : 31 (b) 10 : 41 (c) 10 : 51
(d) 10 : 61 (e) None of these

59. The no. of female voters from district F is what percent more/less than the no. of male voters from district A? (rounded off to nearest integer)
(a) 290% (b) 230% (c) 300%
(d) 305% (e) None of these

60. Find the ratio of no. of male voters from districts B and E together to the no. of female voters from districts C and A together?
(a) 351:430 (b) 341:230 (c) 361:430
(d) 231:410 (e) None of these

Directions (61-65): Given below are two equations in each question, which you have to solve and give answer
(a) if $x > y$
(b) if $x \geq y$
(c) if $y > x$
(d) if $y \geq x$
(e) if $x = y$ or no relation can be established

61. I. $2x^2 - 5x + 2 = 0$ II. $2y^2 - 9y + 7 = 0$

62. I. $3x^2 + 7x + 4 = 0$ II. $y^2 + 9y + 20 = 0$

63. I. $3x^2 + 5x + 2 = 0$ II. $y^2 + 12y + 27 = 0$

64. I. $x^2 - 7x + 10 = 0$ II. $y^2 - 14y + 45 = 0$

65. I. $(x - 16)^2 = 0$ II. $y^2 = 256$

Directions (66-70): What approximate value should come in place of the question mark (?) in the following questions?
Note: (You are not expected to calculate the exact value.)

66. $24.001 \times 14.999 \times 9.998 = ?$
(a) 4200 (b) 3000 (c) 3600
(d) 4000 (e) 2500

67. $14.003\sqrt{?} + 53.0345\sqrt{?} = \frac{67}{26.999} \times (?)$
(a) 801 (b) 720 (c) 729
(d) 721 (e) 744

68. $10.11 \times 36.93 + \sqrt{48.875} \times 19.99 = 17.231 \times \sqrt{?}$
(a) 25 (b) 144 (c) 225
(d) 625 (e) 900

69. $1898.88 \div 189.921 + 9.99 + (?)^2 = 83.89$
(a) 3 (b) 4 (c) 5
(d) 8 (e) 7

70. $39.7\%\ of\ 801 - 250.17 = ? - 63\%\ of\ 801$
(a) 800 (b) 500 (c) 574
(d) 760 (e) 550

ENGLISH LANGUAGE

Directions (71-80): Read the following passage carefully and answer the questions given below it. Certain words are given in bold to help you locate them while answering some of the questions.

ABOUT 1.3 billion people use one or other version of Microsoft's Windows operating systems, and well over a billion have downloaded Mozilla's Firefox web browser. Minor variations aside, every copy of these products—like all other mass-market software—has exactly the same bits in it. This makes such software a honeypot for hackers, who can write attack code that will cause precisely the same damage to, say, every copy of Windows 7 it infects. Worse, the bad guys can **hone** their attacks by practising on their own machines, confident that what they see will be what their victims get.

This computing monoculture—which also extends to the widespread use of particular pieces of hardware, such as microprocessors from Intel and ARM—has long been the **bane** of technologists. In the face of a near constant **onslaught** from hackers, antivirus software is frequently several steps behind the foe. Symantec, one of the commercial pioneers of online security, estimates that antivirus software now stops only 45% of attacks. The firm recently declared that this approach was "dead" and a new one was needed.

Michael Franz, a computer scientist at the University of California, Irvine, agrees. And he believes the answer is to learn from nature. Lots of species are composed of individuals which are, the occasional set of identical twins apart, all slightly different genetically from each other. Sexual reproduction ensures this. Indeed, it is probably the reason sex evolved in the first place, for it means that no bacterium or virus can wipe out an entire population, since some are almost certain to be genetically immune to any given pathogen.

Applying the idea of genetic diversity to software is not a new idea. High-security systems, such as the fly-by-wire programs used in aeroplanes, are designed from the outset with code that differs between installations. But this approach is too costly for large-scale use. Some mass-market software companies have instead introduced modest diversity to deter attackers, such as randomly choosing the starting addresses of big blocks of memory, but this is not enough to defeat a determined hacker.

Dr Franz is therefore taking a novel approach by tweaking the programs, called compilers, that convert applications written in languages such as C++ and Java into the machine code employed by a computer's processor. Most compilers are designed to optimise things such as the speed of the resulting machine code. That leads to a single answer. Dr Franz's "multicompiler" trades a bit of this

optimality for diversity in the compiled code. This leeway, which diminishes the code's speed of execution by an amount imperceptible to the user, enables a multicompiler to create billions of different, but functionally identical, interpretations of the original program. When a user requests a specific application from a cloud-based "app store", the appropriate multicompiler in the store generates a unique version for him, thus making a hacker's task **nigh** impossible.

71. Which is the most suitable title for the passage?
(a) Learning from Nature
(b) Preclusion from Hacking
(c) Divided we Stand
(d) Genetic Diversity and Software
(e) The appropriate Multi compiler

72. What is the author's tone in the passage?
(a) Sarcastic (b) Impersonal
(c) Enthusiastic (d) Hostile
(e) Grieving

73. According to the passage, how the Dr.Franz's multicompiler makes hacker's task impossible?
(i) By converting the applications written in languages into the machine code.
(ii) By creating billions of different interpretations of the original program.
(iii) By extending the code's speed of execution.
(a) Only (i) is true
(b) Only (ii) is true
(c) Both (i) and (ii) are true
(d) Both (ii) and (iii) are true
(e) All are correct

74. According to the passage, what makes the software easily attacked by hackers?
(a) Similar coding instructions in all programs.
(b)Optimization of the speed of resulting machine code.
(c) The widespread use of particular pieces of hardware.
(d) The replica of the software containing same bits.
(e) All of the above

75. Which of the following is false in context of the passage?
(a) Dr. Franz's multicompiler approach is productive as it enhances the speed of the code's execution.
(b) The firm declared that the antivirus approach to protect the software from hackers is not effective.
(c) Antivirus software stops only 45% of attacks.
(d) Sexual reproduction ensures the genetic difference in identical twins of species.
(e) All are true.

76. Which efforts of software companies are found unsuccessful to secure the software from being hacked?
(i) Antivirus Symantec is one of the unsuccessful efforts which stop only 45% of the attacks.
(ii) Randomly choosing the starting addresses of big Block of memory is one such effort.
(iii) Optimising the things such as speed of resulting machine code.
(a) Only (i) is true
(b) Only (ii) is true
(c) Both (i) and (ii) are true
(d) Both (ii) and (iii) are true
(e) All are true

Directions (77-78): Choose the word/group of words which is most **opposite** in meaning to the word/group of words printed in bold as used in passage.

77. Hone
(a) wreck (b) whet (c) secure
(d) practice (e) perfect

78. Onslaught
(a) defense (b) approximate (c) offense
(d) assault (e) violation

Directions (79-80): Choose the word/group of words which is most **similar** in meaning to the word/group of words printed in bold as used in passage.

79. Bane
(a) death (b) scourge (c) boon
(d) corruption (e) content

80. Nigh
(a) distant (b) clear (c) deserving
(d) nearly (e) progressing

Directions (81-90): Which of the phrases (a), (b), (c) and (d) given below each sentence should replace the phrase printed in **bold** letters to make the sentence grammatically correct? If the sentence is correct as it is, mark (e) i.e., "No correction required" as the answer.

81. In Castle town, Rose met the doctor who wanted to know if Freddie was managing **to keep off** her ankle.
(a) to keep away (b) to keep of
(c) to keep out (d) to keep up with
(e) No correction required

82. Don't **give it into** despair just because you didn't get into the college that was at the top of your wishlist.
(a) Give yourself up in (b) Give off in
(c) give up in (d) give in to
(e) No correction required

83. It was dominated by Franklin Roosevelt, the cunning, determined, good-natured president **called forth by** the crisis of the Depression.
(a) call forth on (b) called upon by
(c) called out upon (d) called out by
(e) No correction required

84. Shah Rukh Khan has expressed his disappointment **for being detained** by US authorities at Los Angeles International Airport.
(a) at being detained (b) for detaining
(c) because of detaining (d)owing to be detained
(e) No correction required

85. The teacher asked the pupils to **get going at** some work quietly as she had to leave the classroom.
(a) get even with (b) get hold of
(c) get on with (d) get wind of
(e) No correction required

86. After our month-long trip, it was time to **get along with** the neighbors and the news around town.
(a) keep track on (b) get going with
(c) catch hold of (d) catch up with
(e) No correction required

87. Good instructors will **look upon** early signs of failure in their students
(a) look in (b) look out for (c) look for
(d) look up with (e) No correction required

88. If you **talk towards** someone in authority such as a parent or teacher, you answer them in a rude way
(a) talk down with (b) talk over with
(c) talk back to (d) talk around of
(e) No correction required

89. Before we **take this farther,** let's consider something the Internet has taught us about ourselves.
(a)take that farther (b) took it further
(c) took it farther (d) take that further
(e) No correction required

90. It was great to **think back of** not just that experience, but on why that film still resonates with people.
(a) Think back on (b) think about
(c) think it through (d) think back about
(e) No correction required

Directions (91-100): In the following passage there are blanks, each of which has been numbered and one word has been suggested alongside the blank. These numbers are printed below the passage and against each, five options are given. In four options, one word is suggested in each option. Find out the appropriate word which fits the blank appropriately. If the word written alongside the blank fits the passage, choose option 'e' (No correction required) as the correct choice.

CHINA has long __(91)___[**moved]** between the urge to ___(92)___[**enrich]** its elite with foreign knowledge and skills, and an opposing instinct to turn inward and rebuff such _(93)____[**importance]**. In the 1870s the Qing imperial court ended centuries of educational isolation by sending young men to America, only for the Communist regime to shut out the world again a few decades later. Today record numbers of Chinese study abroad: over half a million people left in 2015 alone, many for America. The Communist Party officially endorses international exchanges in education while at the same time preaching the dangers of Western ideas on Chinese campuses.
A new front in this battlefield is ___(94)____[**emerging]**, as the government cracks down on international schools catering to Chinese citizens. Only holders of foreign passports used to be allowed to go to international schools in China: children of expat workers or the foreign-born offspring of Chinese returnees. Chinese citizens are still __(95)____[**illicit]** from attending such outfits, but more recently a new type of school has proliferated on the mainland, __(96)__ [**proposing]** an international curriculum to Chinese nationals planning to study at foreign universities. Their number has more than doubled since 2011, to over 500. Many are clustered on the wealthy eastern seaboard, but even poor interior provinces such as Gansu, Guizhou and Yunnan have them.
Some international schools are **__(97)____[privately run]**, including offshoots of famous foreign institutions such as Dulwich College in Britain or Haileybury in Australia. Even wholly Chinese ventures often _(98)__ [**taken up]** foreign-sounding names to increase their appeal: witness "Etonkids", a Beijing-based chain which has no link with the illustrious British boarding school. Since 2003 some 90 state schools have ____(99)___[**enabled]** international programmes too, many of them at the top high schools in China, including those ____(100)___**[acquainted]** with Peking.

91. (a) wobbled (b) wavered
(c) oscillated (d) rotated
(e) No correction.

92. (a) supply (b) equip
(c) endow (d) appoint
(e) No correction.

93. (a) influences (b) impact
(c) prevalence (d) instrument
(e) No correction.

94. (a) eminent (b) elusive
(c) requisite (d) obligatory
(e) No correction.

95. (a) elicited (b) apprehended
(c) prohibit (d) Forbidden
(e) No correction.

96. (a) providing (b) presenting
(c) offering (d) contributing
(e)No correction.

97. (a) confidentially run (b) distinctly run
(c) Personally run (d) Publically run
(e) No correction.

98. (a) adopt (b) select
(c) Refrain (d) Outcast
(e) No correction.

99. (a) conducted (b) extended
(c) convoyed (d) opened
(e) No correction.

100. (a) accorded (b) affiliated
(c) provisioned (d)conversant
(e) No correction

Solutions

REASONING ABILITY

Directions (1-5):

Floors	Person	Stream
8	J	Electrical
7	E	Aeronautical
6	K	Automobile
5	D	Civil
4	H	Mechanical
3	F	Chemical
2	I	Software
1	G	Instrumentation

1. (c); **2.** (b); **3.** (e);

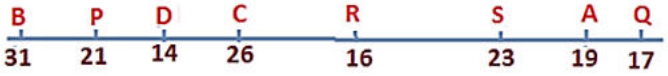
4. (d); **5.** (e);

6. (b); $A > B \geq R \geq C < R \leq Z = M \leq P \geq X$

7. (d);

Day	Person
Monday	A
Tuesday	C
Wednesday	E
Thursday	D
Friday	B

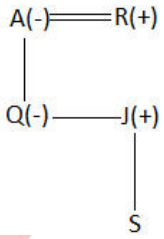
Directions (8-12):



8. (d); **9.** (a); **10.** (c);

11. (b); **12.** (d);

13. (e);



Directions (14-18):

Persons	Year
T	1946
P	1967
Q	1972
R	1982
S	1984
V	1989
U	1992

14. (d); **15.** (b); **16.** (e);

17. (c); **18.** (a);

19. (e); Economics = jo

20. (e); The given number is = 7493652
Number after operation= 5771935
There are two numbers (5,7) which are repeated.

Directions (21-22):

Box	Fruit
K	Litchi
M	Grapes
J	Apple
L	Mango

21. (c);

22. (b);

Directions (23-27):

Days ⟶ Month ↓	10th	27th
March	Y	X
June	W	N
October	Z	O
November	M	V

23. (c);

24. (d);

25. (a);

26. (d);

27. (d);

Directions (28-29): C > A > E > B > D > F

28. (e);

29. (e);

30. (c); 'C > B > A ≥ K = R'

Directions (31-33):

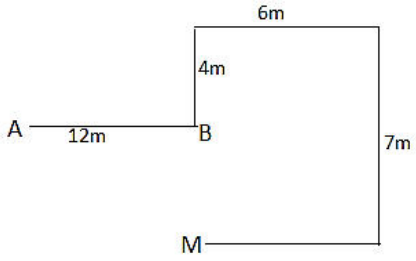
31. (d); I. Y < N (false) II. Y = N (false)

32. (a); I. M < J (false) II. J > L (True)

33. (e); I. P > Y (false) II. T < L (false)

34. (e); As from the given statement the position of G is not fixed so there is two possible case in which G sits three places above A or three places below A. And, the position of L and Q is also not fixed.

35. (e); The distance between B and M= 7-4= 3m



QUANTITATIVE APTITUDE

36. (b); Total S.I. $= \frac{1800\times2\times20}{100} =$ Rs. 720

Total C.I. $= (1800-p)\left[(1+\frac{30}{100})^2-1\right]$

$= (1800-P)\times\frac{69}{100}$

ATQ, $(1800-P)\times\frac{69}{100}-720=315$

or, $(1800-P)=\frac{100}{69}\times1035$

or, $1800-P=1500$

$\Rightarrow P=300$

37. (a); Let their initial investments be $7x$, $5x$ and $3x$ respectively

Ratio of their profit $= 7x\times6+3x\times6 : 5x\times12 : 3x\times12$

$= 60x : 60x : 36x$

$= 15 : 15 : 9$

A's profit $= 3600\times\frac{39}{9}\times\frac{15}{39}$

= Rs. 6000

38. (c); Let, CP of B be $x+120$

And that of A be x

Then, $\frac{25}{100}\times x+\frac{40}{100}(x+120)=178$

or, $\frac{65x}{100}+48=178$

or, $x=200$

C.P. of B $= x+120 =$ Rs. 320

39. (d); Let, age of A be 'x' years,

Then age of B = '$x+10$' years

And age of C = $3x$ years

ATQ, $\frac{x+10+11}{3x}=\frac{3}{2}$

or, $(x+21)2=9x$

or, $7x=42$

$\Rightarrow x=6$

Age of C after 7 years $= 3x+7=18+7=25$ years

40. (d); $\frac{2\pi rh}{\pi r^2h}=\frac{4}{7}$

or, $\frac{2}{r}=\frac{4}{7}$

or, $r=\frac{7}{2}$

also, $\frac{2r}{h}=\frac{14}{5}$

$\Rightarrow h=\frac{5}{2}$

Total surface area $= 2\times\frac{22}{7}\times\frac{7}{2}\left(\frac{7}{2}+\frac{5}{2}\right)$

$= 22\times\frac{12}{2}=132$

41. (b); Sum can be odd in two cases :

1. First card is odd numbered & second one is even.

2. First card is even numbered & second one is odd.

Required probability $= \frac{13}{25}\times\frac{12}{24}+\frac{12}{25}\times\frac{13}{24}=\frac{13}{25}$

42. (c); ATQ, $\frac{D-11}{2x}=\frac{4D}{16x}$

or, D = 22 km

also, $\frac{D-2}{2}=2x$

or, $D-2=4x$

or, $x=5$

Speed of boat $= 9x = 45kmph$

43. (b); Let, C takes x days to complete the work alone
Then, B takes $\frac{x}{3}$ days to complete the work alone
$\frac{1}{x}+\frac{3}{x}=\frac{1}{12}$
or, $x = 48$ days
Suppose, A and B take 'y' days to complete the work together
Then, A takes $2y$ days to complete the work alone
$\frac{1}{2y}+\frac{1}{16}=\frac{1}{y}$
or, $\frac{1}{2y}=\frac{1}{16}$
or, $2y = 16$
Hence, A will take 16 days

44. (a); Money spent on brother $= \frac{1}{4}\times 68\% = 17\%$
Money spent on sister $= \frac{9}{17}\times 68\% = 36\%$
ATQ,
$(36\% - 17\%)$ of total $= 3800$
$\Rightarrow$ Total $=$ Rs. 20000
Saving $= \frac{100-(32+17+36)}{100}\times 20000$
$= \frac{15}{100}\times 20000$ = Rs. 3000

45. (c); $\frac{x-2}{y+3}=\frac{3}{2}$
or, $2x - 4 = 3y + 9$
or, $2x - 3y = 13$ .....(i)
$\frac{x-4}{y+7}=\frac{5}{3}$
or, $3x - 12 = 5y + 35$
or, $3x - 5y = 47$ ....(ii)
Solving (i) and (ii),
$x = -76, y = -55$
Fraction $= \frac{76}{55}$

46. (e); $27 \times 2.5 + 1 = 68.5$;
$\times 0.5 + 1,\ \times 1 + 1,\ \times 1.5 + 1,\ \times 2 + 1,\ \times 2.5 + 1$

47. (b);

15	24	49	98	179	300
9	25	49	81	121	
3^2	5^2	7^2	9^2	11^2	

48. (a); $\times 1 + 1,\ \times 2 + 2,\ \times 3 + 3,\ \times 4 + 4,\ \times 5 + 5$

49. (d);

9	11	22	51	107	199
2	11	29	56	92	
9	18	27	36		

50. (b);

67	75	59	91	27	155
8	−16	32	−64	128	

51. (a); Total sales of company B in 2012 and that of company A in 2014 $= 2500 + 4000$
$= 6500$
Total sales of company A in 2011 and that of company B in 2015 $= 2000 + 4000 = 6000$
Ratio $= \frac{6500}{6000}=\frac{13}{12}$

52. (b); Sales of company A in 2016 $= 5000 \times \frac{120}{100} = 6000$
Sales of company B in 2016 $= 4000 \times \frac{110}{100} = 4400$
Difference $= 6000 - 4400 = 1600$

53. (c); Total sales in 2011 $= 2000 + 1000 = 3000$
Total sales in 2015 $= 5000 + 4000 = 9000$
Req.% $= \frac{9000-3000}{3000} = 200\%$

54. (b); Sales of company A from 2012 to 2014 $= 3500 + 4500 + 4000 = 12000$
Sales of company B from 2013 to 2015 $= 3000 + 4500 + 4000 = 11500$
Difference $= 500$

55. (a); Sales of company A in 2010 $= 2000 \times ¾ = 1500$
Percentage % $= \frac{5000-1500}{1500}\times 100$
$= \frac{3500}{1500}\times 100 = 233.33\%$

56. (a); No. of male voters from district A and B $= \frac{30}{100}\times 350 + \frac{54}{100}\times 400$
$= 105 + 216 = 321$
Total no. of female voters from E and D $= 250 \times \frac{54}{100} + 300 \times \frac{55}{100} = 135 + 165 = 300$
Difference $= 321 - 300 = 21$

57. (b); Average no. of voters from district, B, C and D $= \frac{400+370+250}{3}$
Male voters from D,E, and F together
$= 250 \times \frac{46}{100} + 300 \times \frac{45}{100} + 625 \times \frac{32}{100}$
$= 115 + 135 + 200 = 450$
Req. % $= \frac{450-340}{450}\times 100 = 24.44\%$

58. (a); No. of male voters from district D and E $= 250 \times \frac{46}{100} + 300 \times \frac{45}{100} = 115 + 135 = 250$
No. of female voters from C, E and F $= 370 \times \frac{50}{100} + 300 \times \frac{55}{100} + 625 \times \frac{68}{100} = 185 + 165 + 425 = 775$
Ratio $= \frac{250}{775}=\frac{10}{31}$

59. (d); No. of female voters from F $= 625 \times \frac{68}{100}$
$= 425$
No. of male voters from A $= \frac{350}{1} \times \frac{30}{100}$
$=105$
Req.% $= \frac{425-105}{105} \times 100$
$= 304.7\%$
$\approx 305\%$

60. (a); No. of male voters from B $= 400 \times \frac{54}{100} =216$
No. of male voters from E $= 300 \times \frac{45}{100}$
$=135$
No. of female voters from C $= 370 \times \frac{50}{100}$
$=185$
No. of female voters from A $= 350 \times \frac{70}{100}$
$=245$
Required ratio $= \frac{351}{430}$

61. (e); ***I***. $2x^2 - 4x - x + 2 = 0$
$\Rightarrow 2x(x-2) - 1(x-2) = 0$
$\Rightarrow (2x-1)(x-2) = 0$
$\Rightarrow x = \frac{1}{2}, 2$

II. $2y^2 - 9y + 7 = 0$
$\Rightarrow 2y^2 - 7y - 2y + 7 = 0$
$\Rightarrow y(2y-7) - 1(2y-7) = 0$
$\Rightarrow y = \frac{7}{2}, 1$

$\therefore$ No relation

62. (a); ***I***. $3x^2 + 3x + 4x + 4 = 0$
$\Rightarrow 3x(x+1) + 4(x+1) = 0$
$\Rightarrow x = -1, {}^{-4}/_{3}$

II. $y^2 + 5y + 4y + 20 = 0$
$\Rightarrow y(y+5) + 4(y+5) = 0$
$\Rightarrow y = -4, -5$

$\therefore x > y$

63. (a); ***I***. $3x^2 + 3x + 2x + 2 = 0$
$\Rightarrow 3x(x+1) + 2(x+1) = 0$
$\Rightarrow x = -1, \frac{-2}{3}$

II. $y^2 + 9y + 3y + 27 = 0$
$\Rightarrow y(y+9) + 3(y+9) = 0$
$\Rightarrow y = -3, -9$

$\therefore x > y$

64. (d); ***I***. $x^2 - 5x - 2x + 10 = 0$
$\Rightarrow x(x-5) - 2(x-5) = 0$
$\Rightarrow x = 2, 5$

II. $y^2 - 9y - 5y + 45 = 0$
$\Rightarrow y(y-9) - 5(y-9) = 0$
$\Rightarrow y = 9, 5$

$\therefore x \leq y$

65. (b); ***I***. $(x-16)(x-16) = 0$
$\Rightarrow x = 16$

II. $y = \pm 16$

$\therefore x \geq y$

66. (c); $24 \times 15 \times 10 \approx 3600$

67. (c); $14\sqrt{?} + 53\sqrt{?} = \frac{67}{27} \times ?$
$67\sqrt{?} = \frac{67}{27} \times ?$
$\sqrt{?} = 27$
$? = 729$

68. (e); $10 \times 37 + 7 \times 20 = 17 \times \sqrt{?}$
$\sqrt{?} = 30$
$? = 900$

69. (d); $\approx 1900 \div 190 + 10 + ?^2 = 84$
Or, $?^2 = 84 - 10 - 10$ *or*, $? = 8$

70. (c); $\approx 40 \times 8 - 250 = ? - 63 \times 8$
$?= 574$

ENGLISH LANGUAGE

71. (c); Here the title "Divided we stand" is more potent. As mentioned in the passage, Dr. Franz's multicompiler trades a bit for diversity in the code to secure the software from being hacked.

72. (b); Here the author's tone is impersonal as he is concerned about computer's security.

73. (b); Refer to the second last line of last paragraph, "This leeway …… of the original program."

74. (d); Refer to the second line of first paragraph, "Minor variations aside, every copy of these products—like all other mass-market software—has exactly the same bits in it. This makes such software a honeypot for hackers."

75. (a); Refer to the last paragraph, "Dr Franz's "multicompiler" trades a bit of this optimality for diversity in the compiled code. This leeway, which diminishes the code's speed of execution by an amount imperceptible to the user, enables a multicompiler to create billions of different, but functionally identical, interpretations of the original program." Hence only option (a) is incorrect in context of the passage.

76. (c); Refer to the last sentence of second last paragraph, "Some mass-market software companies have instead introduced modest diversity to deter attackers, such as randomly choosing the starting addresses of big blocks of memory, but this is not enough to defeat a determined hacker".
Refer to the last sentence of the second paragraph, "Symantec, one of the commercial pioneers of online security, estimates that antivirus software now stops only 45% of attacks. The firm recently declared that this approach was "dead" and a new one was needed." Hence both statements (i) and (ii) are correct in context of the passage.

77. (a); **Hone** means sharpen or refine. Hence it has opposite meaning to '**wreck**'.

78. (a); **Onslaught** means a destructive attack. Hence it has opposite meaning to '**defense**'.

79. (b); **Bane** means a cause of great distress. Hence it has same meaning as **scourge**.

80. (d); **Nigh** means near. Hence it has same meaning to **nearly**.

81. (e); '**Keep off**' means to avoid encroaching on or touching hence option (e) is the correct choice for the given question.

82. (d); 'Give in' means to cease fighting or arguing; admit defeat therefore it is most appropriate in context of the sentence and is the correct choice for the given question.

83. (e); There is no error in the statement as 'called forth' means to cause (something) to come into action or existence.

84. (a); Disappointed 'at' is the correct usage here.

85. (c); 'get on with' means to continue or resume doing (something); make progress regarding hence option (c) is the correct choice for the given question.

86. (d); 'Catch up with' is the correct usage as it means succeed in reaching a person who is ahead of one. It is also the most appropriate option if you consider the context of the sentence hence option (d) is the correct choice for the given question.

87. (b); 'look out for' means be vigilant and take notice hence option (b) is the correct choice for the given question as other options change the meaning of the sentence.

88. (c); 'Talk back' means reply defiantly or insolently hence option (c) is the correct choice for the given question.

89. (d); The use of 'further' which means additional to what already exists or has already taken place, been done, or been accounted for is correct and the first form of 'take' should be used therefore option (d) is the correct choice for the given question.

90. (a); 'Think back on' means to recall and is the most appropriate choice for the given question.

91. (c);

92. (b);

93. (a);

94. (e);

95. (d);

96. (c);

97. (e); No correction is required

98. (a);

99. (d);

100. (b);

Mock 04

SBI PO Prelims 2016

REASONING ABILITY

Directions (1-5): In these questions, relationship between different elements is shown in the statements. These statements are followed by two conclusions. Mark answer
(a) If only conclusion I follows.
(b) If only conclusion II follows.
(c) If either conclusion I or II follows.
(d) If neither conclusion I nor II follows.
(e) If both conclusions I and II follow.

1. **Statements:** A > B ≤ C = D ≤ E, C ≥ F = G > H
Conclusions: I. G ≤ E **II.** A > H

2. **Statements:** H ≥ T > S ≤ Q, T ≥ U = V > B
Conclusions: I. V > S **II.** B ≤ H

3. **Statements:** F < K ≤ L, H ≥ R > K
Conclusions: I. H > L **II.** R > F

4. **Statements:** N ≥ P > K = L, P ≤ Q < Z, T > K
Conclusions: I. N > Q **II.** Z < T

5. **Statements:** P < H = O ≥ N, E ≥ H < S
Conclusions: I. N ≤ E **II.** S > P

Directions (6-10): Study the given information carefully to answer the given question.

J, K, L, M, N, O and G are seven different boxes of different colours i.e. Brown, Orange, Silver, Pink, Yellow, White and Green but not necessarily in the same order.

The Box which is of Brown colour is immediately above J. There are only two box between M and the box which is of Brown colour and Box M is above the Brown colour box. The Box which is of Silver colour is above M but not immediately above M. There are only three box between L and the box which is of Silver colour. The box which is of Green colour is immediately above L. The box which is of Pink colour is immediately above the box G. Only one box is there between K and N. Box K is above N. Neither box K nor J is of Yellow colour. J is not of orange colour.

6. How many box is/are there between M and G?
(a) One (b) Two (c) Three
(d) Four (e) None

7. What is the colour of 'O'?
(a) Green (b) Brown (c) Silver
(d) Pink (e) Can't be determined.

8. Find the pair of colour and boxes which is not correct?
(a) K-Pink (b) O-Silver (c) J-white
(d) G-Brown (e) None of these

9. Which of the following condition is correct regarding yellow colour with respect to N?
(a) There is one box between N and the Yellow colour box
(b) N is immediately above of yellow colour box
(c) The Yellow colour box is related to the box which is immediately above N
(d) All of the above is true
(e) None of the above is true.

10. Which of the following colour belongs to 'J'?
(a) Brown (b) Pink (c) Yellow
(d) Orange (e) None of these.

Direction (11-13): Study the following information and answer the given question.
- T is the sister of D. D is married to P. P is the son of M.
- T is the mother of J. Y is the father of U.
- Y has only one son and only one daughter.
- U is the daughter of T. Q is the son of D.

11. How is P related to T ?
(a) Brother (b) cannot be determined
(c) Brother-in-law
(d) Cousin brother (e) Uncle

12. How is J related to D ?
(a) Son (b) Niece
(c) Son-in-law (d) Nephew
(e) Daughter

13. If M is wife of W then how is Q related to W ?
(a) Son-in-law (b) Grandson
(c) Nephew (d) Son
(e) Cannot be determined

Directions (14–15): Read the given information carefully and answer the given question:
P is 9 m to the south of K. K is 5 m to the east of H. H is 4 m to the north of B. L is 3 m west of B. D is 7 m south of L. G is 8 m east of D.

14. If Point Z is 5 m to the west of point P, then what is the distance between B and Z?
(a) 8 m (b) 9 m (c) 5 m
(d) 2 m (e) 6 m

15. How far and in which direction is point K from Point G?
(a) 11 m to the south (b) 7 m to the north
(c) 11 m to the north (d) 7 m to the south
(e) 11 m to the west

Directions (16–20): Study the lowing information to answer the given questions

S, T, U, V, W, X, Y and Z are sitting in a straight line equidistant from each other (but not necessarily in the same order). Some of them are facing south while some are facing north.

(Note : Facing the same direction means, if one is facing north then the other also faces north and vice-versa. Facing the opposite directions means, if one is facing north then the other faces south and vice-versa)

S faces north. Only two people sit to the right of S. T sits third to the left of S. Only one person sits between T and X. X sits to the immediate right of W. Only one person sits between W and Z. Both the immediate neighbors of T face the same direction. U sits third to the left of X. T faces the opposite direction as S. Y does not sit at any of the extremes ends of the line. V faces the same direction as W. Both Y and U face the opposite direction of Z.

16. How many persons in the given arrangement are facing North?
(a) More than four (b) Four
(c) One (d) Three (e) Two

17. Four of the following five are alike in a certain way, and so form a group. Which of the following does not belong to the group?
(a) W, X (b) Z, Y (c) T, S
(d) T, Y (e) V, U

18. What is the position of X with respect to Z?
(a) Second to the left (b) Third to the right
(c) Third to the left (d) Fifth to the right
(e) Second to the right

19. Who amongst the following sits exactly between Z and W?
(a) T (b) Y (c) X
(d) W (e) U

20. Who is sitting 2nd to the right of T?
(a) Z (b)V (c)X
(d)W (e)None of these.

Directions (21-27): Study the following information carefully to answer the given questions W, X, Y, Z, M, N and O belong to three different department R&D , Marketing and HR with at least 2 of them in any of these department. Each of them has a favourite Colour such viz. Green, Blue, Red, Pink, Black, Violet and Purple but not necessarily in the same order.

X works in departmet Marketing with M. M's favourite Colour is Purple. Those who work in department R&D do not like Green and Pink. The one who likes Blue works only with O in department HR. The one whose favourite Colour is Black does not work in the same department with either M or O. W does not work in department Marketing. W likes Violet. Z and N work in the same department. N does not like Red. The one whose favourite Colour is Pink does not work in department Marketing.

21. In which department W, Z and N work?
(a) Cannot be determined (b) R&D
(c) Marketing (d) HR (e) None of these

22. Whose favourite Colour is Green ?
(a) X (b) W (c) Y
(d) Z (e) None of these

23. Which of the following is M's favourite Colour?
(a)Violet (b)Pink (c) Purple
(d)Black (e)None of these

24. Which of the following combination is right ?
(a)W – HR : Blue (b)O – R&D : Black
(c)N – HR : Pink (d)Z – R&D : Red
(e)None of these

25. Y works in which department?
(a)R&D (b)Marketing (c)HR
(d)Cannot be determined (e)None of these

26. Whose favourite Colour is Pink ?
(a) X (b)W (c)O
(d) Z (e)None of these

27. In which department M works?
(a) Cannot be determined (b) R&D
(c) Marketing (d) HR
(e) None of these

Directions (28-32): Study the following information carefully and answer the questions given below:

Seven persons, P, Q, R, S, T, U and V are going to attend marriage ceremony but not necessarily in the same order, in seven different months (of the same year) namely January, February, March, June, August, October and December but not necessarily in the same order. Each of them also likes a different fruit namely Banana, Grapes, Papaya, Orange, Mango, Litchi and Apple but not necessarily in the same order. R is going to attend marriage in a month which has less than 31 days. Only two persons are going to attend marriage ceremony between the month in which R and S attend marriage ceremony. The one who likes Banana is going to attend marriage ceremony immediately before T. Only one person attends ceremony before the one who likes Papaya. Q attends ceremony immediately after the one who likes Papaya. Only three persons attend marriage ceremony between Q and the one who likes Mango. T likes neither Mango nor Papaya. P attends ceremony immediately before T. V likes Apple. The one who likes Grapes attends ceremony in the month, which has less than 31 days. The one who attends ceremony in March does not like Orange.

28. Which of the following represents the month in which S attends marriage ceremony ?
(a) January (b) Cannot be determined
(c) October (d) December (e) June

29. Which of the following represents the people who attend ceremony in January and June respectively?
(a) V, S (b) U, S (c) Q, T
(d) U, R (e) V, R

30. How many persons attend ceremony between the months in which V and R attend ceremony?
(a) None (b) Three (c) Two
(d) One (e) More than three

31. As per the given arrangement, R is related to Banana and P is related to Orange following a certain pattern, which of the following is U related to following the same pattern ?
(a) Mango (b) Litchi (c) Apple
(d) Papaya (e) Grapes

32. Which of the following fruits, does U like ?
(a) Papaya (b) Mango (c) Banana
(d) Grapes (e) Orange

Directions (33-35): Study the given information carefully and answer the given questions.

Among six books i.e. – A, B, C, D, E and F kept in library shelf of different size. Book A is kept at that shelf which is only less in size than shelf in which book D is kept. Only three shelfs are less in size than shelf in which book C is kept. The Shelf in which F is kept is less in size than shelf in which E is kept. Book F is not kept at the lowest shelf.

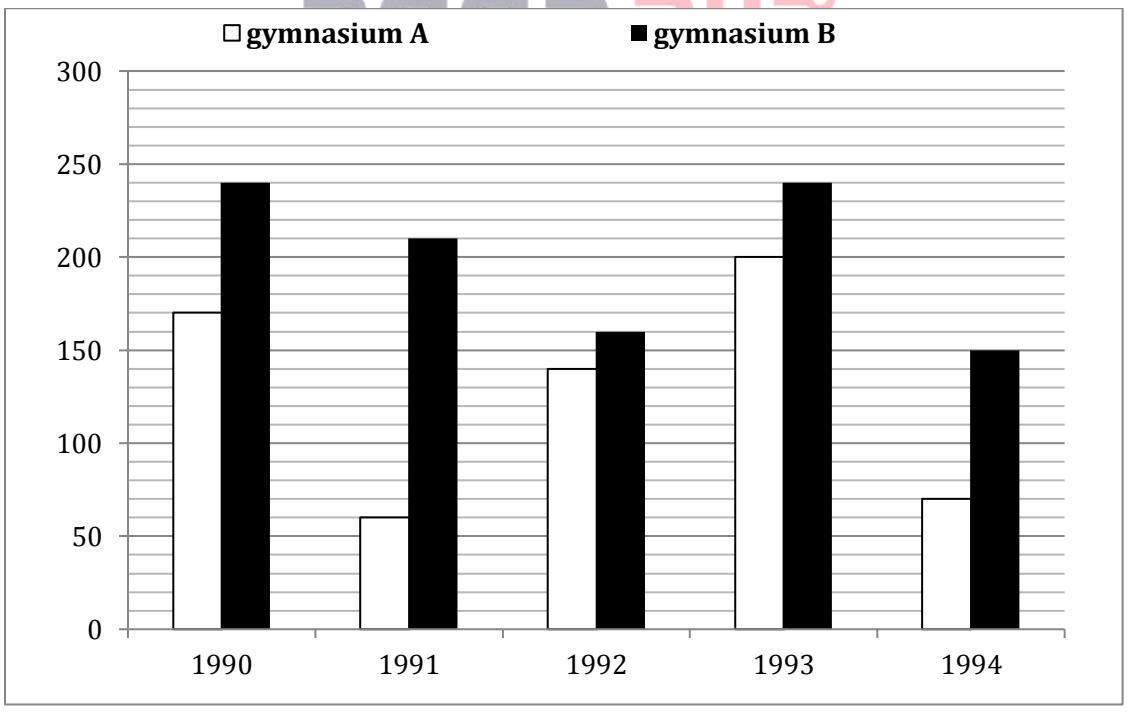
33. Who amongst the following book is kept at lowest shelf?
(a) B (b) A (c) E
(d) C (e) None of these

34. If size of shelf in which book E is kept is 16 cm^2, then which of the following may be the size of shelf in which book B is kept?
(a) 19 cm^2 (b) 22 cm^2 (c) 18 cm^2
(d) 17 cm^2 (e) 12 cm^2

35. How many shelf are less in size than shelf in which book E is kept?
(a) One (b) Two (c) Three
(d) Four (e) More than four

QUANTITATIVE APTITUDE

Directions (36-40): In the Bar-chart, total members enrolled in different years from 1990 to 1994 in two gymnasium A and B. Based on this Bar chart solve the following questions-



36. If in the year 1995 there is 30% increase in total number of members enrolled then in 1994 by both gymnasium, then find the total no. of members enrolled in 1995?
(a) 282 (b)296 (c) 292
(d) 286 (e) none of these

37. The ratio between total members of both gymnasium in 1991 to total members in 1994 of both gymnasium is-
(a) 22:27 (b) 21:11 (c) 11:21
(d) 25:13 (e) 27:22

38. The number of members of gymnasium A in 1991 is what % of the no. of members of gymnasium B in 1994.
(a) 60% (b) 55% (c) 58%
(d) 62% (e) none of these

39. The total number of members enrolled in gymnasium A from 1991 to 1994 together is what percent more than the total number of members enrolled in gymnasium B in 1993 and 1994 together?(Rounded off to 2 decimal places)
(a) 10.51% (b) 20.51% (c) 15.51%
(d) 17.51% (e) none of these

40. Total member enrolled in gymnasium B in 1993 and 1994 together is what % more than members enrolled in gymnasium A in 1990 and 1994 together?
(a) 60% (b) 65% (c) 62.5%
(d) 61.5% (e) none of these

Directions (41-45): What should come in place of question mark (?) in the following number series?

41. 4,3,4,7,15, ?
(a)38.5 (b)40 (c)45
(d)37.5 (e)none of these

42. 7,5,7,17,63, ?
(a)321 (b)309 (c)305
(d)301 (e)none of these

43. 11,14,19,28,43, ?
(a) 60 (b) 63 (c)66
(d) 70 (e) none of these

44. 2 60 10 120 30 ?
(a) 222 (b) 216 (c) 208
(d) 230 (e) None of these

45. 23 50 108 232 492 ?
(a) 1028 (b) 1024 (c) 1020
(d) 1032 (e) None of these

Directions (46-50): There are five companies and we have given the no. of employee working in different companies. In the table we have also given the percentage of male and female employees of HR and Marketing department.

Company	Employees	HR		Marketing	
		Male	Female	Male	Female
P	400	12	14	9	7
Q	650	19	10	11	13
R	500	28	14	4	7
S	550	31	9	6	4
T	300	12	18	3	7

46. If 60% of the employees of company T in HR department have MBA degree and 40% of the employees of the same company in the Marketing dept. have MBA degree, then how many employees have MBA degree in company T in both dept. together.
(a) 98 (b) 108 (c) 106
(d) 92 (e) 66

47. Find the ratio of female employees of company Q in HR dept. to male employees of company R in Marketing dept. ?
(a) 4:13 (b) 5:22 (c) 22:5
(d)13:4 (e) none of these

48. Total number of HR employees of company P is what % more than the total no. of marketing employee in company T?
(a) 236.76% (b) 226.67% (c)276.76%
(d) 246.67% (e) none of these

49. The ratio of male employees in HR dept. of company P and R together to female employees of Marketing department in company S and T together?
(a) 187:27 (b) 43:188 (c) 188:43
(d) 27:187 (e) none of these

50. Difference between female employees of HR dept. in all companies together (excluding company S) and the female employees of Marketing dept. in all companies together (excluding company Q)?
(a) 139 (b) 129 (c) 135
(d) 141 (e) none of these

51. A mixture contains wine and water in the ratio 3 : 2 and another mixture contains them in the ratio 4 : 5. How many litres of the latter must be mixed with 3 litres of the former so that the resultant mixture may contain equal quantities of wine and water ?
(a) $1\frac{2}{3}$ litre (b) $5\frac{2}{5}$ litre (c) $4\frac{1}{2}$ litre
(d) $3\frac{3}{4}$ litre (e) None of these

52. A trader sells two bullocks for Rs. 8,400 each, neither losing nor gaining in total. If he sold one of the bullocks at a gain of 20%, the other is sold at a loss of
(a) 20% (b) $18\frac{2}{9}\%$ (c) $14\frac{2}{7}\%$
(d) 21% (e) None of these

53. Two trains, A and B, start from stations X and Y towards each other, they take 4 hours 48 minutes and 3 hours 20 minutes to reach Y and X respectively after they meet. If train A is moving at 45 km/hr., then the speed of the train B is
(a) 60 km/hr (b) 64.8 km/hr
(c) 54 km/hr (d) 37.5 km/hr
(e) None of these

54. Out of his total income, Mr. Kapoor spends 20% on house rent and 70% of the remaining on house hold expenses. If he saves Rs 1,800 what is his total income (in rupees)?
(a) Rs 7,800 (b) Rs 7,000 (c) Rs 8,000
(d) Rs 7,500 (e) None of these

55. A can do a piece of work in 8 days which B can destroy in 3 days. A has worked for 6 days, during the last 2 days of which B has been destroying. How many days must A now work alone to complete the work?
(a) 7 days (b) $7\frac{1}{3}$ days (c) $7\frac{2}{3}$ days
(d) 8 days (e) None of these

Directions (56-60): What approximate value should come in place of the question mark (?) in the following questions? (You are not expected to calculate the exact value.)

56. 57% of 394-2.5% of 996=?
(a) 215 (b) 175 (c) 200
(d) 180 (e) 227

57. $96.996 \times 9.869 + 0.96 = ?$
(a) 860 (b) 870 (c) 1080
(d) 965 (e) 1100

58. $\frac{3}{5} \times \frac{1125}{1228} \times 7 = ?$
(a) 7 (b) 12 (c) 9
(d) 4 (e) 15

59. $\left(\sqrt{329} \times 25\right) \div 30 = ?$
(a) 12 (b) 15 (c) 24
(d) 21 (e) 9

60. $(638 + 9709 - 216) \div 26 = ?$
(a) 275 (b) 345 (c) 440
(d) 300 (e) 390

Directions (61-65): Solve the equations given below and answer
(a) if $x > y$ (b) if $x < y$
(c) if $x \geq y$ (d) if $x \leq y$
(e) $x = y$ or no relation can be established

61. $6x^2 + 31x + 35 = 0$
$2y^2 + 3y + 1 = 0$

62. $2x^2 - \left(4 + \sqrt{41}\right)x + 2\sqrt{41} = 0$
$10y^2 - \left(18 + 5\sqrt{41}\right)y + 9\sqrt{41} = 0$

63. $2x^2 + 9x + 10 = 0$
$4y^2 + 28y + 45 = 0$

64. $15x^2 - 11x - 12 = 0$
$20y^2 - 49y + 30 = 0$

65. $2x^2 - 15 = 7x$
$17y = -7 - 6y^2$

66. A and B are partners in a business. They invest in the ratio 5 : 6, at the end of 8 months A withdraws. If they receive profits in the ratio of 5 : 9, find how long B's investment was used?
(a) 12 months (b) 10 months
(c) 15 months (d) 14 months
(e) 18 months

67. There are 3 red balls, 4 blue balls and 5 white balls. 2 balls are chosen randomly. Find probability that 1 is red and the other is white.
(a) 5/22 (b) 5/23 (c) 7/22
(d) 4/9 (e) None of these

68. According to a new plan rolled out by HISP Bank, the rate of simple interest on a sum of money is 8% p.a. for the first two years, 10% p.a. for the next three years and 6% p.a. for the period beyond the first five years. Simple interest accrued on a sum for a period of eight years is Rs. 12,800. Find the sum.
(a) Rs. 24, 000 (b) Rs. 16, 000
(c) Rs. 15, 000 (d) Rs. 13,500
(e) None of these

69. Three Science classes A, B and C take a Life Science test. The average score of students of class A is 83. The average score of students class B is 76. The average score of class C is 85. The average score of class A and B is 79 and average score of class B and C is 81. Then the average score, of classes A, B and C is
(a) 80 (b) 80.5 (c) 81
(d) 81.5 (e) None of these

70. A hemispherical bowl of internal diameter 54 cm contains a liquid. The liquid is to be filled in cylindrical bottles of radius 3 cm and height 9 cm. How many bottles are required to empty the bowl?
(a) 221 (b) 343 (c) 81
(d) 243 (e) 162

ENGLISH LANGUAGE

Directions (71-75): Rearrange the following six sentences (A), (B), (C), (D), (E) and (F) in the proper sequence to form a meaningful paragraph and then answer the questions given below.

A. The evidence on the benefits of the interlinking scheme is mixed. On the one hand the project is built on hopes that it will boost per capita water availability for 220mn water-hungry Indians.

B. The initial plan to interlink India's rivers came in 1858 from a British irrigation engineer, Sir Arthur Thomas Cotton.

C. The scheme also envisions an area more than twice the size of Andhra Pradesh receiving additional water for irrigation and to eventually even out the precarious swings between floods and droughts.

D. And concerns surrounding escalating cost projections, which have reportedly jumped to something closer to Rs. 11 lakh crore.

E. Yet even as the project moves forward it must consider the risks at hand, which include the possibility that it could displace nearly 1.5 million people due to the submergence of 27.66 lakh hectares of land;

F, Since late last year, the scheme has been implemented by the Central government in several segments such as the Godavari-Krishna interlink in Andhra Pradesh, and the Ken-Betwa interlink in Madhya Pradesh.

71. Which of the following should be the **FIRST** sentence after rearrangement?
(a)A (b) B (c) C
(d) D (e) F

72. Which of the following should be the **SECOND** sentence after rearrangement?
(a)A (b) B (c) C
(d) D (e) F

73. Which of the following should be the **THIRD** sentence after rearrangement?
(a)A (b) B (c) C
(d) D (e) F

74. Which of the following should be the **FOURTH** sentence after rearrangement?
(a)A (b) B (c) C
(d) D (e) E

75. Which of the following should be the **SIXTH (last)** sentence after rearrangement?
(a)A (b) B (c) C
(d)D (e) E

Directions (76-85): Read the passage carefully and answer the questions given below it. Certain words/ phrases are given in bold to help you locate them while answering some of the questions.

Today emerging markets account for more than half of world GDP on the basis of purchasing power according to the international Monetary Fund (IMF). In the 1990s, it was about a third and in the late 1990s 30% of countries in the developing world managed to increase their output per person faster than America did, thus achieving what is called 'Catch-up growth'. That catching up was somewhat lackadaisical. The closed at just 1.5% a year.

Some of this was due to slower growth in America, most was not. The most impressive growth was in four of the biggest emerging economies Brazil, Russia, India and China BRICs. These economies have grown in different way and for different reasons. The remarkable growth of emerging markets in general and the BRICs in particular transformed the global economy in many ways. Some wrenching commodity prices soared and the cost of manufactures and labour sank.

A growing and vastly more accessible pool of labour in emerging economies played a part in both wage stagnation and rising income inequality in each ones. Global poverty rates tumbled. Gaping economic imbalances fuelled an era of financial vulnerability and laid the ground work for global crisis. The shift towards the emerging economies will continue. But its most tumultuous phase seems to have more or less reached its end. Growth rates have dropped, the nature of their growth is in the process of changing too and its new mode will have lesser direct effects on the rest of the world. The likelihood of growth in other emerging economies having an effect in the near future comparable to that of the BRICs in the recent past is low. The emerging giants will grow larger and their ranks will swell, but their tread will no longer shake the Earth as it once did.

After the 1990s, there followed 'convergence with a vengeance'. China's pivot towards liberalization and global markets came at a **propitious** time in terms of politics, business and technology. Rich economies were feeling relatively relaxed about globalization and current account deficits. America's booming and confidence was little troubled by the growth of Chinese industry or by off-shoring jobs to India. And the technology, etc., necessary to assemble and maintain complex supply chains were coming into their own, allowing firms to spread their operations between countries and across oceans. The **tumbling** costs of shipping and communication sparked 'globalisation's second unbounding' (the first was the

simple ability to provide consumers in one place with goods from another). As longer supply chains infiltrated and connected places with large and fast growing working-age populations, enormous quantities of cheap new labour became accessible.

In 2007, China's economy **expanded** by an eye-popping 14.2%. India managed 10.1% growth, Russia 8.5 % and Brazil 6.1%. The IMF now reckons there will be a slow down in growth. China will grow by just 7.6% in 2013 India by 5.6% and Russia and Brazil by 2.5%. Other countries have impressive growth potential. 'Next 11' (N 11) which includes Bangladesh, Indonesia, Mexico, Nigeria and Turkey. But there are various reasons to think that this N11 cannot have an impact on the same scale as that of the BRICs.The first is that these economies smaller. The N11 has population of just over 1.3 billion, less than half that of the BRICs. The second is that the N11 is richer now than the BRICs were back in the day.

The third reason that the performance of the BRICs cannot be repeated is the very success of that performance. The world economy is much larger than it used to be twice as in real terms as it was in 1992 according to IMF figures. But whether or not the world can build remarkable era of growth will depend in large part on whether new giants tread a path towards greater global co-operation or stumble in times of **tumult** and in the worst case fight.

76. According to the passage which of the following is a reason for the author's prediction regarding N11 countries?
(a) N11 countries are poorer, have less resources than BRICs countries and do not have much scope to grow
(b) The size of these countries is too great to fuel a high rate of growth as expected by BRICs countries
(c) The world economy is so large that the magnitude of growth from these countries will have to be huge to equal the growth of BRICs
(d) These economies are agricultural and have not opened up their economies yet so their scope of growth of BRICs
(e) Other than those given as options

77. What is the author's view of globalisation's second unbounding?
(a) It proved beneficial since it created a large number of jobs and tremendous growth in cross-border trade
(b) It disturbed the fragile balance of power anong BRICs nations and caused internal strife.
(c) It cased untold damage to America's economy since it restricted the spread of American firms off-shore
(d) It proved most beneficial for the agricultural sector creating huge employment opportunities
(e) Citizens in advanced countries became much better off than those in emerging economies.

78. What effect did rise in economies of BRICS have on the global economy?
(a) It helped stabilize the global economy and insulate it from the fall out of the global financial crisis
(b) Labour became more highly skilled and wages rose alarmingly reducing the off-shoring of jobs to developing countries
(c) Though worldwide poverty rates tumbled, the gap between the rich and the poor in rich economies increased
(d) The cost of living and level of inflation in these countries were maintained at low levels.
(e) All the given options are effects of the rise in BRICs economies.

79. What does the phrase 'their ranks will swell but their tread will no longer shake the Earth as it once did' convey in the context of the passage?
(a) While many countries will try and achieve the same rate of growth as BRICS they will not succeed
(b) The growth of BRICs countries had change the world's economy in ways that any further growth will not have such a disruptive effect on the world economy
(c) Developing countries have strengthened their fiscal systems in such a way that they will not be shaken to such an extent again
(d) Poverty may increase as the gap between the rich the poor increase but it will never reach the same levels as prior to the crisis.
(e) Citizens in advanced countries become much better off than those in emerging economies

80. Which of the following can be said about 'convergence with a vengeance?

A. After the 1990s advanced economies like America were open to the idea of free trade and globalization.

B. There were huge technological advances which were conducive to allowing business to spread their area of operations.

C. Rich economies felt threatened by the competition from china.

(a) Only A (b) Only B (c) Only C
(d) A and B (e) B and C

81. What is the author's main objective in writing this passage?
A. To urge emerging economies to deal with growth which can be disruptive maturely and without conflict.
B. To point out that while the period of growth of BRICs was disruptive this disruption has almost come to a close.
C. To criticise advanced economies for their handling of growth and promoting competition and conflict in certain regions.
(a) A and B (b) Only A (c) Only C
(d) B and C (e) all of these

82. Which of the following is most nearly the **SAME** in meaning as the word '**Tumbling'** as used in the passage?
(a) Jumbling (b) Confusing
(c) Reducing (d) Dilapidated
(e) Hurrying

83. Which of the following is most nearly the **SAME** in meaning as the word '**Propitious'** as used in the passage?
(a) Forlorn (b) Felicitous (c) Baleful
(d) Portent (e) Augury

84. Which of the following is most **OPPOSITE** in meaning to the word '**expanded'** as used in the passage?
(a) Widened (b) Pressured (c) Delayed
(d) Shrunk (e) Frightened

85. Which of the following is most **OPPOSITE** in meaning to the word '**tumult'** as used in the passage?
(a) Ferment (b) Tranquility
(c)Upheaval (d) Mayhem
(e) Turmoil

Directions (86-90): Read each sentence to find out whether there is any grammatical or idiomatic error in it. The error, if any, will be in one part of the sentence. The number of that part is the answer. If there is 'No error', the answer is (e). (Ignore errors of punctuation, if any.)

86. The protestors went on a rampaging (a) / and set ablaze three shops (b) / resulting in injuries to 30 people (c) / including women and children. (d)/ No error (e)

87. It is evident that (a)/the banking sector has underwent (b) / tremendous change during(c)/the past two decades.(d)/No error(e).

88. The reports prompted the chairman of (a)/ the organizing committee to address a hurried press conference (b)/ where he reprimanded the media (c) /for conducting a "prejudiced campaign".(d)/No error(e).

89. The merchant counted (a)/ the number of pearls (b)/ to make sure that (c)/ none of them were missing. (d)/No error (e).

90. How is it that (a) neither your friend Mahesh (b)/ nor his brother Ramesh have protested (c)/ against this injustice? (d)/ No error (e).

Directions (91-95): The Following questions have two blanks, each blank indicating that something has been omitted. Choose the set of words for each blank that best fits the meaning of the sentence as a whole.

91. As this country has become more ..... industrial and internationalised, it has, like all Western democracies, experienced a necessary increase in the ..... of the executive.
(a) urbanised; role
(b) objective; wealth
(c) synthesised; efficiency
(d) civilised; convenience
(e) concretised; vision

92. When interpersonal problems ..... but are not dealt with, the organisation's productivity inevitably .....
(a) surface; develops (b) focus; increases
(c) establish; projects (d) develop; exhibits
(e) exist; diminishes

93. Participative management, in which everyone has ..... into a decision that a leader then makes, is a mechanism for.....employees.
(a) share; protecting
(b) value; thwarting
(c) motivation; involving
(d) reward; stimulating
(e) input; empowering

94. Lack of ..... is basic to good teamwork, but our ability to work with others depends on our .....
(a) rigidity; compatibility
(b) dogmatism; motivation
(c) professionalism; vulnerability
(d) positivism; flexibility
(e) consideration; acumen

95. Complete the constant openness is a notion that can be ..... to absurdity . Am I..... to stop everyone on the street and tell them my reaction to their appearance?
(a) consigned; communicated
(b) reduced; required
(c) attributed; requested
(d) projected; destined
(e) subjected; confined

Directions (96-100): In the following passage, some of the words have been left out, each of which is indicated by a number. Find the suitable word from the options given against each number and fill up the blanks with appropriate words to make the paragraph meaningful

Adult tigers will meet socially only during courtship, when a male and female stay together for several days. After successful mating, the tigress will (**96**) away the male to (**97**) the cubs by herself. Cubs are born blind after a gestation period between 96 and 104 days. If their eyes open after two weeks, they do not begin to eat well until the second month. At this stage, they are most (**98**) to predators like jackals and hyenas as they are left alone for long periods when the tigress is away hunting. Infant mortality is therefore high; a tigress (**99**) raises more than one cub per litter successfully. She will keep her (**100**) with her for almost two years, teaching them everything necessary to perfect their survival skills. At the end of this time, she will gently push them away so that she is free to search out a new mate and begin the breeding cycle anew.

96. (a)Run (b)Give (c)Throw (d)Drive (e)Make

97. (a)Rear (b)Grow (c)Lift (d)Develop (e)Produce

98. (a)Averse (b)Vulnerable (c)Subject (d)Inclined (e)Prone

99. (a)Seldom (b)Usually (c)That (d)Only (e)Sometimes

100. (a)Newborn (b)Offspring (c)Descendent (d)Cub (e)Child

Solutions

REASONING ABILITY

1. (a); $I.\ G = F \leq C = D \leq E(TRUE)$ $II.\ A > B \leq C \geq F = G > H(FALSE)$

2. (d); $I.\ V = U \leq T > S(FALSE)$
$II.\ B < V = U \leq T \leq H(FALSE)$

3. (b); $I.\ H \geq R > K \leq L(FALSE)$
$II.\ R > K > F(TRUE)$

4. (d); $I.\ N \geq P \leq Q\ (FALSE)$
$II.\ Z > Q \geq P > K < T(FALSE)$

5. (e); $I.\ N \leq O = H \leq E(TRUE)$
$II.\ S > H > P(TRUE)$

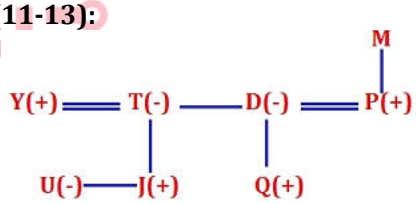
Directions (6-10):

Boxes	Colours
O	Silver
K	Orange
M	Yellow
N	Green
L	Pink
G	Brown
J	White

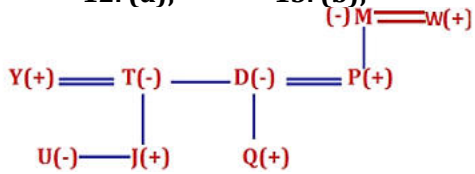
6. (b); **7. (c);** **8. (a);**

9. (c); **10. (e);**

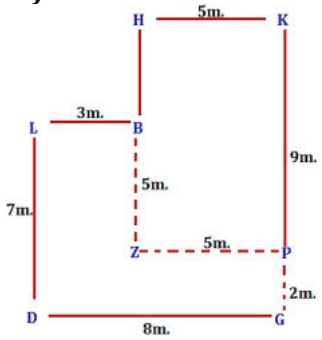
Direction (11-13):



11. (c); **12. (d);** **13. (b);**



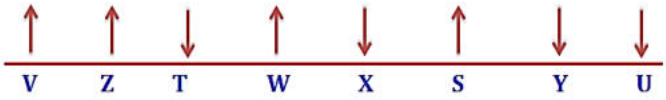
Direction (14-15):



14. (c);

15. (c);

Directions (16-20):



16. (b); **17. (d);** **18. (b);**

19. (a); **20. (b);**

Directions (21-27):

Persons	Department	Colour
W	R&D	Violet
X	Marketing	Green
Y	HR	Blue
Z	R&D	Red
M	Marketing	Purple
N	R&D	Black
O	HR	Pink

21. (b); **22. (a);** **23. (c);**

24. (d); **25. (c);** **26. (c);**

27. (c);

Directions (28-32):

Months in which persons are attending ceremony	Different Persons	Fruits
January	V	Apple
February	U	Papaya
March	Q	Litchi
June	R	Grapes
August	P	Banana
October	T	Orange
December	S	Mango

28. (d); **29. (e);** **30. (c);**

31. (b); **32. (a);**

Directions (33-35): Size of shelf in which different books are kept:
D's shelf >A's shelf >C's shelf >E's shelf >F's shelf >B's shelf

33. (a); **34. (e);** **35. (b);**

QUANTITATIVE APTITUDE

36. (d);Required members $= \frac{130}{100} \times 220 = 286$

37. (e); Required Ratio $= \frac{60+210}{70+150} = \frac{270}{220} = 27 : 22$

38. (e); Required % $= \frac{60}{150} \times 100$
$= 20 \times 2$
$= 40\%$

39. (b); Required % $= \frac{(60+140+200+70)-(240+150)}{(240+150)} \times 100$
$= \frac{470-390}{390} \times 100$
$= \frac{80}{390} \times 100$
$= 20.51\%$

40. (c); Required % $= \frac{(240+150)-(170+70)}{(170+70)} \times 100$
$= \frac{150}{240} \times 100 = 62.5\%$

41. (a); $\times 0.5 + 1, \times 1 + 1, \times 1.5 + 1, \times 2 + 1 \ldots\ldots$

42. (b); $\times 1 - 2, \times 2 - 3, \times 3 - 4, \times 4 - 5, \times 5 - 6 \ldots\ldots$

43. (c); +3, +5, +9, +15.....
+2, +4, +6.....
15+8=23, 43+23=66.

44. (e); $1^3 + 1,\ 4^3 - 4, 2^3 + 2, 5^3 - 5, 3^3 + 3, 6^3 - 6$
$6^3 - 6 = 210$

45. (a); Series is
$\times 2 + (4 + 4 \times 0)$
$\times 2 + (4 + 4 \times 0 + 4 \times 1)$
$\times 2 + (4 + 4 \times 0 + 4 \times 1 + 4 \times 2)$.. so on

46. (e); Required no. of employees
$= \frac{60}{100} \times \frac{30}{100} \times 300 + \frac{40}{100} \times \frac{10}{100} \times 300$
$= 54 + 12 = 66$

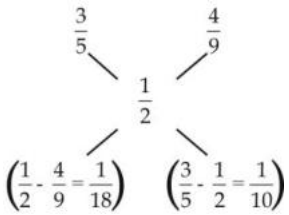
47. (d); Required Ratio $= 65 : 20$
$= 13 : 4$

48. (d); HR employees in company P = 26×4=104
Marketing employee in company T =10×3 = 30
Required % $= \frac{104-30}{30} \times 100 = 246.67\%$

49. (c); Required Ratio $= \frac{48+140}{22+21} = \frac{188}{43} = 188 : 43$

50. (a);Required difference $= (56 + 65 + 70 + 54) - (28 + 35 + 22 + 21)$
$= 245 - 106 = 139$

51. (b);



Ratio = $\frac{1}{18}:\frac{1}{10}$
= 10 : 18 = 5 : 9
Required Quantity = $\frac{3}{5}\times 9$
= $\frac{27}{5}=5\frac{2}{5}$ litre

52. (c); S.P. of two bullock = 8400 + 8400
= 16800 Rs.
CP of first bullock = $\frac{100}{120}\times 8400 = 7000$
CP of second bullock =16800 – 7000=9800
Required % loss =$\frac{9800-8400}{9800}\times 100$
=$\frac{1400}{9800}\times 100$
= $\frac{7}{49}\times 100 \quad \Rightarrow =\frac{100}{7}=14\frac{2}{7}\%$

53. (c); $\frac{S_2}{S_1}=\sqrt{\frac{\frac{24}{5}}{\frac{10}{3}}}=\sqrt{\frac{72}{50}}$
$\frac{S_2}{S_1}=\sqrt{\frac{36}{25}}=\frac{6}{5}$
$S_2=\frac{45\times 6}{5}$
= 54 km/hr

54. (d); Saving % = 100 – (20 + 56) = 24%
∴ 24% = 1800
∴ 100% = $\frac{1800}{24}\times 100$ = 7500 Rs.

55. (b); In 6 days part of the work done by
A = $\frac{6}{8}=\frac{3}{4}$
during 2 days, part of the work destroyed by B = $\frac{2}{3}$
work done = $\frac{3}{4}-\frac{2}{3}=\frac{9-8}{12}=\frac{1}{12}$
Remaining work = $1-\frac{1}{12}=\frac{11}{12}$
∴ Required no of days = $\frac{11}{12}\times 8$
= $7\frac{1}{3}$ days.

56. (c); ? = $\frac{394\times 57}{100}-\frac{996\times 2.5}{100}$
= $\frac{400\times 57}{100}-\frac{1000\times 2.5}{100}$
= 228−25 = 203
∴ Required answer = 200

57. (d); ? = 97× 10 + 1 = 971
∴ Required answer = 965

58. (d); ? = $\frac{3}{5}\times\frac{1125}{1228}\times 7 = 4$

59. (b); ? = $\frac{\sqrt{339}\times 25}{30}$=15

60. (e); ? = $\frac{638+9709-216}{26}=390$

61. (b); $6x^2+21x+10x+35=0$
$3x(2x+7)+5(2x+7)=0$
$(3x+5)(2x+7)=0$
$x=\frac{-5}{3},\frac{-7}{2}$
$2y^2+2y+y+1=0$
$2y(y+1)+1(y+1)=0$
$(2y+1)(y+1)=0$
$y=\frac{-1}{2},-1 \quad \Rightarrow x<y$

62. (e); $2x^2-4x-\sqrt{41}x+2\sqrt{41}=0$
$2x(x-2)-\sqrt{41}(x-2)=0$
$x=2,\frac{\sqrt{41}}{2}$
$10y^2-18y-5\sqrt{41}y+9\sqrt{41}=0$
$2y(5y-9)-\sqrt{41}(5y-9)=0$
$y=\frac{9}{5},\frac{\sqrt{41}}{2}$
Relation can not be established

63. (c); $2x^2+4x+5x+10=0$
$2x(x+2)+5(x+2)=0$
$x=-2,\frac{-5}{2}$
$4y^2+28y+45=0$
$4y^2+18y+10y+45=0$
$2y(2y+9)+5(2y+9)=0$
$y=\frac{-5}{2},\frac{-9}{2} \Rightarrow x\geq y$

64. (e); $15x^2-20x+9x-12=0$
$5x(3x-4)+3(3x-4)=0$
$x=\frac{-3}{5},\frac{4}{3}$
$20y^2-25y-24y+30=0$
$5y(4y-5)-6(4y-5)=0$
$y=\frac{6}{5},\frac{5}{4}$
No relation can be established

65. (e); $2x^2-10x+3x-15=0$
$2x(x-5)+3(x-5)=0$
$x=-\frac{3}{5},5$
$6y^2+14y+3y+7=0$
$2y(3y+7)+1(3y+7)=0$
$y=-\frac{1}{2},\frac{-7}{3}$, *no relation can be established*

66. (a); 5x : 6x, Let B investment was used for y months
8× 5x : 6x × y = 5 : 9
$\frac{40x}{6xy}=\frac{5}{9} \Rightarrow y=12$

67. (a); P= $\frac{{}^3C_1\times{}^5C_1}{{}^{12}C_2}=\frac{5}{22}$

68. (e); Let the sum be 'x' Rs.
$\frac{x\times 8\times 2}{100}+\frac{x\times 10\times 3}{100}+\frac{x\times 6\times 3}{100}=12800$
$\frac{64x}{100}=12800$
Sum = 12800 × $\frac{100}{64}$ = 20000 Rs.

69. (d); Let no. of students in class A, B and C be x, y and z

$\therefore$ A = $83x$

B = $76y$ $\Rightarrow$ C =$85z$

Now, A + B = $79x + 79y$

B + C = $81(y + z) = 81y + 81z$

$\therefore 83x + 76y = 79x + 79y$

$4x = 3y$

$\frac{x}{y} = \frac{3}{4}$

And, $76y + 85z = 81y + 81z$

$5y = 4z$

$\frac{y}{z} = \frac{4}{5}$

$\therefore x : y : z = 3 : 4 : 5$

$\therefore$ Required average = $\frac{83\times3+76\times4+85\times5}{12}$

$= \frac{249+304+425}{12} = \frac{978}{12}$ = 81.5

70. (e); Volume of hemi-sphere $= \frac{2}{3} \times \pi \times (27)^3$ cm^3

Volume of cylindrical bottle $= \pi r^2 h$

$= \pi \times (3)^2 \times 9$

$\therefore$ Required No. of bottles = $\frac{\frac{2}{3}\pi\times(27)^3}{\pi\times(3)^2\times9}$

$= 2 \times 3 \times 27 = 162$ bottles

ENGLISH LANGUAGE

71. (b); **72. (e);** **73. (a);**

74. (c); **75. (d);**

76. (c); The reason for author's prediction regarding N11 countries is that the world's economy is so large that the magnitude of growth from these countries will have to be huge to equal the growth of the BRICs.

77. (a); Refer to the 4th paragraph of the passage, "The tumbling costs of shipping and communication sparked 'globalisation's second unbounding' (the first was the simple ability to provide consumers in one place with goods from another). As longer supply chains infiltrated and connected places with large and fast growing working-age populations, enormous quantities of cheap new labour became accessible."

78. (a);

79. (b);

80. (d); It is not mentioned in the passage if rich economies are threatened.

81. (a); The author is not critizing advanced economies for their growth handling.

82. (c); Tumbling has the same meaning as the word reducing

83. (b); Felicitous means well chosen or suited to the circumstances hence is similar in meaning to Propitious.

84. (d); Shrunk is opposite to expand.

85. (b); Tumult means a loud, confused noise, especially one caused by a large mass of people hence tranquility is the word most opposite in meaning.

86. (a); 'A' is used inappropriately because there is no need of article here. So, it is to be removed.

87. (b); Replace 'underwent' with 'undergone' as third form of the verb is to be used here with has.

88. (e); No error correction required.

89. (d); Replace 'were' with 'was' as subject is singular.

90. (c); use 'has' in place of 'have'.

91. (a); Urbanised' and 'civilised' are the two suitable words here. But, 'Urbanised' gives the right context in the sentence. Hence, (a) is correct usage.

92. (e); For the first blank, 'develop' and 'exist' are the two words suitable to be used. But, 'exhibits' doesn't fit the second blank as it is not negative in meaning. Hence, (e) is appropriate

93. (c); 'Participation' itself gives the idea of being 'involved' into an act. Hence, 'involving' fits the second blank. Also, when employees are a part of management then it truly 'motivates' others. Hence, (c) is correct.

94. (a); 'Rigidity' and 'dogmatism' are the suitable words to be used in the first blank as these are negative words which is required there. But, 'compatibility' is the suitable usage in the second blank which gives the sense of being acceptable.

95. (b); reduced fits with first blank. Hence, (b) is the correct choice

96. (d); **97. (a);** **98. (b);**

99. (a); **100. (b);**

Mock 05

SBI PO Mains 2019

REASONING ABILITY

Direction (1-2): Study the following information carefully and answer the questions given below:

Ten persons are sitting in two rows. In row 1, A, B, C, D, E are sitting, and all are facing South and in row 2, P, Q, R, S, T are sitting, and all are facing North. Each person sitting in row 1 is facing another person of row 2. Three persons sit between Q and T. A faces the person who sits 3rd to the left of T. Two persons sit between A and B. P sits 2nd to the right of S. Two persons sit between E and D, who doesn't face P.

1. Who among the following faces the person who sits immediate right of R?
(a) B (b) C (c) A
(d) D (e) None of these

2. Four of the following five are alike in certain way based from a group, find the one which does not belong to that group?
(a) B (b) C (c) D
(d) T (e) Q

Direction (3-5): Study the following information carefully and answer the questions given below:

Seven family members of three generations are sitting in a row and all are facing North. Three persons sit between V's father and V's sister, who sits at extreme end. S is grandson of P, who is mother in law of U. T is husband of R and sits at extreme end. V is son of Q, who sits 2nd to the left of T. Three persons sit between Q and R. P sits 2nd to the left of S, who doesn't sit next to T. One person sits between V and R's son.

3. Who among the following sits 2nd to the left of V's wife?
(a) P (b) Q (c) R
(d) S (e) None of these

4. How is Q related to T?
(a) Father (b) Mother (c) Father in law
(d) Mother in law (e) None of these

5. How many persons are sitting between son of T and father in law of U?
(a) None (b) One (c) Two
(d) Three (e) More than three

Direction (6-9): A number arrangement machine when given an input line of numbers rearranges them following a particular rule in each step. The following is an illustration of input and rearrangement.
Input: 734269 825497 647538 219354 961357 321658
Step I: 962437 794528 835746 453912 753169 856123
Step II: 453912 753169 794528 835746 856123 962437
Step III: 135924 135796 579248 357468 135268 379246
Step IV: 3458 33554 351832 152848 31048 211824
Step V: 20 20 22 28 16 18
Step V is the last step of the above arrangement as the intended arrangement is obtained.
As per the rules followed in the given steps find out the appropriate steps for the given input:
Input: 856347 745982 329584 512379 954267 463512

6. What is the difference between the 3rd number from left in step II and 2nd number from right in step IV?
(a) 391834 (b) 391826 (c) 134099
(d) 134091 (e) None of these

7. Which of the following number is 3rd from right in step V?
(a) 10 (b) 20 (c) 22
(d) 23 (e) None of these

8. What will come when the number which is 2nd from right in step IV is divided by the number which is 2nd from left in final step?
(a) 14912 (b) 15992 (c) 13592
(d) 12952 (e) None of these

9. What is the sum of 2nd number from left in step II and 4th number from right in step III?
(a) 1119927 (b) 1121707 (c) 647015
(d) 648795 (e) None of these

Direction (10-12): Study the following information carefully and answer the questions given below:

A square table is inscribed in another square table. Eight family members P, Q, R, S, T, U, V and W are sitting in middle of the side of squares. Each person sits at one square is facing their spouse. V faces Q. Only one person sits between V and husband of R. W faces the one who is an immediate neighbor of R. P is an immediate neighbor neither of R nor of W. W doesn't face T. P sits immediate left of S, who faces inside.

10. Who among the following sits immediate right of the wife of S?
(a) Q (b) R (c) T
(d) U (e) None of these

11. Who among the following is the spouse of U?
(a) P (b) S (c) V
(d) W (e) None of these

12. Who among the following faces to T?
(a) P (b) Q (c) R
(d) S (e) None of these

Direction (13-14): Study the following information carefully and answer the questions given below:

Eight persons A, B, C, D, E, F, G, H are sitting around a circular table and all are facing towards the center.
1. P @ Q means P sits 2nd to the left of Q
2. P # Q means P sits opposite to Q
3. P $ Q means P is an immediate neighbor of Q
4. P % Q means P sits 3rd to the left of Q
5. P & Q means P sits 3rd to the right of Q
6. P^Q means P is not an immediate neighbor of Q.
Given Statements:
H&E$G, B#E, C@G, D#F, E^C^F

13. Which of the following is true?
(a) H%D (b) A$D (c) D#B
(d) G$F (e) Both (a) and (d)

14. Who among the following sits 3rd to the left of B?
(a) C (b) D (c) A
(d) E (e) None of these

Direction (15-16): Study the following information carefully and answer the questions given below:

A & B means A is 15 m to the north of B
A @ B means A is 23 m to the east of B
A # B means A is 20 m to the south of B
A % B means A is 12 m to the west of B

15. If P % Q # R & S @ T # U is true and Point X is 5m to the south of T, then what is the shortest distance between point X and point P?
(a) 6m (b) 8m (c) 10m
(d) 11m (e) None of these

16. What is the shortest distance between Point P and Point S?
(a) 11m (b) 12m (c) 13m
(d) 14m (e) None of these

Direction (17-18): Study the following information carefully and answer the questions

Clubs (♣), diamonds (♦), hearts (♥) and spades (♠)
A ♠ B means A is to the East of B
A ♦ B means A is to the West of B
A ♥ B means A is to the North of B
A ♣ B means A is to the South of B
There are 3 buses travelling from Z to Y.
Bus 1: K 15 ♦ Z, J 10 ♣ K, M 10 ♦ J, D 18 ♥ M, C 29 ♠ D, P 9 ♥ C, Y 4 ♦ P
Bus 2: E 36 ♣ Z, F 6 ♦ E, G 14 ♥ F, H 19 ♦ G, L 39 ♥ H, Y 25 ♠ L
Bus 3: N 33 ♠ Z, Q 4 ♥ N, S 9 ♦ Q, T 4 ♥ S, C 20 ♦ T, U 4 ♦ C, U 4 ♣ V, Y 5 ♥ V

17. What is the distance between L and P?
(a) 29m (b) 39m (c) 30m
(d) 40m (e) None of these

18. What is the shortest distance and direction of Y with respect to E?
(a) 49m, South (b) 55m, West (c) 53m, North
(d) 45m, East (e) None of these

Direction (19-21): Study the following information carefully and answer the questions

The following words are coded in this manner:
'World make sense meaningful' is coded as '8$A, 2!R, 2#N, 14$F'
'Rain starts every week' is coded as '8^A, 10#R, 2+E, 8!E'
'Easily mind (a) is coded as '12%R, 8$I, 10+I'
'Reputation prestige turns food' is coded as '12%I, 2~R, (b), 8@O'

19. What will come in the blank '(a)'?
(a) Prepares (b) Ready (c) Turn
(d) Funny (e) Early

20. What will come in the blank '(b)'?
(a) 3$F (b) 8*D (c) 10+E
(d) 10#D (e) 14^I

21. What is the code of "every person"?
(a) 2%E 10+S (b) 9+E 2%S (c) 2+E 10%S
(d) 9%E 2+S (e) None of these

22. In the following question a statement is given followed by three statements numbered as I, II and III. You have to read all three statements and decide which of them strengthens or weakens the statement.
Statement: Among the governments, there is a strong policy emphasis on improving living conditions in urban areas as more and more people are looking to migrate to semi-urban or rural areas. People are willing to compromise on their standard of living in order to live in a healthier/pollution free environment.
(I) Cities are economically vibrant spaces around the world and drawing a large number of rural migrants looking for better prospects. This is a sustained trend, particularly in developing countries now a day.
(II) A fresh look at urban governance is necessary as migration from rural areas picks up pace.
(III) The rate of migration has shown a consecutive decline in the last three Censuses. It was possible that this slow-down signalled the worsening conditions in urban slums, where most of the rural immigrants were concentrated.
(a) Only statement (I) strengthen but statement (II) and (III) is the neutral statement.
(b) Both statement (I) and statement (III) strengthen the given statement but statement (II) is neutral statement.
(c) Both statement (I) and statement (II) are neutral statements and statement (III) strengthen the statement.
(d) Both statement (I) and (II) weakens but statement (III) strengthen the given statement.
(e) All statement (I), (III) and statement (II) weaken the given statement.

23. The revenue of Company A has been decreasing from past one year while the prices of the products offered by the company have also decreased from past six months.
Which of the following cannot be the reason of downfall of the revenue of Company A?
(a) Company B is offering same product at much lower prices than Company A.
(b) The quality of the products of Company A is not upto a desirable level.
(c) The demand of the product offered by Company A has been decreasing due to the usage of an old technology in it.
(d) There is an abrupt rise in the availability of the product offered by Company A but the demand has not changed accordingly.
(e) Chinese companies offered better and cheap products than Indian Companies.

24. Today's children are different from the children of previous generations. They are more interested in playing video games or sitting hours on the play stations than in playing outdoor games. They are more technology oriented. These things are depriving the child from developing their personality. They lack the stamina and strength of the previous generations.
Which of the following statement weakens the given statement?
(I) The children of today are mentally active as this has made children much more organized and mature than in previous times.
(II) These gadgets are addicting. They have made the children so much addicted to PC and PS that they do not enjoy the outdoor games anymore.
(III) The children of present time are not physically active. These children are not being a team player anymore, they grow up to become shy and introvert instead of being bold and extrovert.
(a) Only I (b) Both III and I (c) Only II
(d) Both II and III (e) All I, II and III

25. A survey conducted recently shows that religious people are more financially successful than atheists. This proves that following religious practices or having religious beliefs is not only important for your spiritual health but also beneficial in maintaining a healthy bank account.
Which of the following, if true, would most seriously weaken the above conclusion?
(a) The survey does not tell us if those people became financially successful after they started practicing religion or they started practicing religion after they became successful.
(b) Some people embrace religion and spirituality mainly because they believe that somehow being religious or spiritual can help them achieve financial success.
(c) Most of the poor people are too busy thinking about earning their daily livelihood.
(d) Percentage of atheists among the total population is highest in most of the developed countries.
(e) Spiritual and religious people lead a more disciplined life.

Direction (26): Study the following information in which a statement is followed by five assumptions, read carefully and answer the question below-

The banking sector is facing tough times. But the sector is facing only short-term pain as the rise in non-performing assets (NPAs) is proving a key challenge for the industry at large. The regulator wanted some stringent measures to be taken, and the government is coming out with so many reforms and policies.

26. Which of the following can be assumed from the given statement?
(a) NPA was 2.4% more in last two years as compared to the present one.
(b) The steps taken by the government are not enough to revamp the banking sector.
(c) Manufacturing sector is performing far better than the banking sector for last five years.
(d) After the implementation of suitable expedient, the things are likely to be changed for banking sector.
(e) The increase in NPA is the only factor responsible for the difficult time of banking industry.

Direction (27): Study the following information in which a statement is followed by five conclusions, read carefully and answer the question below-

Other than being an essential source of water for Indian agriculture, the monsoon plays a critical role in flushing out pollutants over Asia. However, recently increased pollution — particularly from coal burning — could potentially weaken this ability of the monsoon.

27. Which of the following can be deduced from the given statement?
(a) The unusually high concentration of particulate matter in the last few days in India clearly shows that air pollution is emerging as a big problem.
(b) As the climate gets warmer and frequency of rains reduces, such spurts in coarse particles making breathing difficult will become a new normal and the government is not waking up to the alarm.
(c) Both the periodicity and duration of dry spells in the country were rising as total rainfall events in a year had fallen even though the average rainfall in a year has not changed much, a direct consequence of climate change.
(d) The annual average rainfall has remained the same because the frequency of heavy downpours increased in the past two decades.
(e) The air quality in the region deteriorated because of dust storms in western India, particularly Rajasthan.

28. In the following question a statement is given followed by some more statements. You have to read all the statement and decide which of them weakens the statement.
The NITI Aayog released the results of a study warning that India is facing its "worst" water crisis in history and that the demand for potable water will outstrip supply by 2030, if steps are not taken.
Which of the following most weakens the above statement?
(a) Currently 600 million Indians face high to extreme water shortage and about two lakh people die every year due to inadequate access to potable water.
(b) People may face water scarcity and the country will suffer a loss of up to 6 per cent of the GDP.
(c) The country's nearly 70 per cent of water is contaminated, which puts India at the 120th position among 122 countries in the water quality index.
(d) The ranks of all states in the index on the composite water management, comprising 9 broad sectors with 28 different indicators covering various aspects of ground water, restoration of water bodies, irrigation, farm practices, drinking water, policy and governance.
(e) The condition of availability of water currently in India is better than the water crisis which India had faced in 1960.

Direction (29): Study the following information in which a statement is followed by five assumptions, read carefully and answer the question below-

"If we slightly increase the price of our product then we can improve the quality of our product to increase the number of customers from our only rival company V,"-A statement by owner of company U.

29. Which of the following can be assumed from the given statement?
(a) Without increasing the price, the quality of the product offered by company U can't be increase.
(b) Quality offered by company V of the product is better than the quality offered by company U.
(c) Improvising the quality is the only way to attract more number of customers.
(d) The price offered by the rival company V is already higher than the price offered by company U.
(e) Superior quality even for bit higher price will definitely increase the demand of the product in the market.

Direction (30): Study the following information in which a statement is followed by some statement, read carefully and answer the question below-

A company has X decided to increase the HRA allowances of its employees due to reallocation of the company to NCR region.

30. Which of the following can be inferred from the given statement?
(I) The HRA allowances directly depend on the region of living of the employee.
(II) The employees of the company X are on strike due to the reallocation of the company.
(III) The profit amount of company X has increased so it has also increased the amount of HRA of its employees.
(a) Both (I) and (II) (b) Both (II) and (III)
(c) Only (I) (d) Only (III)
(e) None of these

Direction (31-35): Study the following information to answer the given questions below:
Twelve persons are sitting around two circular table as one is inside in another one. Those sitting in outer circle facing towards the circle while those sitting in inner circle facing outside the center.

A, B, C, D, E, F six persons are sitting around the inner circular table.

P, Q, R, S, T, U six persons are sitting around the outer circular table.

Note- The persons of outer circular table are sitting exactly behind the persons sitting around the inner circular table.
B is sitting second to the right of E. R is an immediate neighbour of the one who faces B. Only one person sits between C and F (either from the left or from the right). C is not an immediate neighbour of E. Q is sitting behind A. Q sits second to the right of R. Only two persons sit between R and T (either from the left or from the right). U is an immediate neighbour of P. T is not sitting behind E. U does not sits opposite to the immediate neighbours of the one who faces R.

Now they start playing cards game. They shuffled a pack of cards. 1. E draws one card and changes his place according to the given conditions, 2. S draws one card and changes his place according to the given conditions similarly others draw cards and change their positions according to the conditions given below (Only positions will be changed as the direction will remain static as per the directions given above for each circle)--
Conditions:
1. If the card drawn is spade, the person who draws it exchange its position with the other person facing towards him (exactly behind or ahead) in the other circle.
2. If card drawn is heart, person exchange its position with the person sitting second to the left of him within its circle.
3. If the card drawn is diamond, the person who draws it exchange its position with the person sitting exactly opposite to him within that circle (as both of them are sitting in the same circle).
4. If card drawn is club, person who draws it exchange its position with the person sitting immediate right of him within its circle.

Draws:
1. E draws queen of Club
2. S draws Jack of Club
3. P draws 3 of Spade
4. A draws a King of Diamond
5. D draws Ace of Heart
6. U draws 9 of Heart
7. C draws 7 of Diamond
8. F draws 4 of Spade

***Note-** All the persons draws card in a serial way as given above.
(ex- First E draws then S draws ……..so on…..)

31. After all persons changed their places based on the above conditions, who among the following is facing S in the other circle?
(a) A (b) D (c) F
(d) R (e) U

32. After all persons changed their places based on the above conditions, who among the following is sitting second to the right of A in the same circle?
(a) C (b) D (c) F
(d) P (e) U

33. After all persons changed their places based on the above conditions, then who among the following is sitting to the immediate right of U?
(a) S (b) B (c) F
(d) R (e) T

34. How many persons are sitting between Q and B in the outer circle when counted from the left of Q (in the final arrangement)?
(a) One (b) More than three (c) Three
(d) None (e) Two

35. Four of the following are alike in a certain way (based on the final arrangement) so form a group which of the following does not belong to the group?
(a) A, T (b) D, B (c) E, R
(d) Q, F (e) U, P

Directions (36-40): Study the information carefully and answer the questions given below.

There are three floors in a given building such that floor 2 is above floor 1 and floor 3 is above floor 2. In the building there are three flats in each floor such that Flat A is in the west of Flat B, which is in the west of Flat C. In the building each Flat on each floor has an area of 2520 ft and each flat has some certain number of room and no two flat has same number of rooms. The area of each rooms of one of the flat on the odd number floor is 280 ft. The floor having 9 rooms is one of the floors below the floor having each room area of 360 ft. The area of each room on floor 3rd of Flat A is 350 ft more than the area of the flat having 9 rooms. Total number of Rooms in all the flats of floor 2nd is 15. Number of Rooms in Flat C of 2nd floor is more than the number of Rooms in Flat A of 2nd floor but less than the number of rooms in Flat B of 2nd floor. The flat having each room area of 420 ft is in the west of flat having each room area of 252 ft. There is only one floor between the floor having 2 rooms and the floor having each room area 630 ft but in the same flat. The flat having each room area 504 ft is on even number floor. The Floor having each room area of 315 ft is kept immediately below the floor having 5 rooms.

36. What is the area of a room in Flat B on floor 2?
(a) 340 (b) 360 (c) 396
(d) either (a) or (c) (e) None of these

37. What is the total number of rooms on floor 3rd?
(a) 22 (b) 21 (c) 20
(d) 18 (e) None of these

38. Which of the following statement is true?
(a) Total number of rooms on floor 2 is 16
(b) Area of each room is 494 ft of flat A on floor 1
(c) Total rooms in Flat B of all three floors is 20.
(d) Total rooms in Flat A of all three floors is 9.
(e) None is correct

39. What is the area of room of flat B on floor 3rd?
(a) 420 ft (b) 400 ft (c) 385 ft
(d) 342 ft (e) None of these

40. How many rooms are there of the west of the flat who's each room area is 280 ft?
(a) 2 (b) 4 (c) 3
(d) 5 (e) None of these

Directions (41-45): Study the information carefully and answer the questions given below.

A certain number of persons are standing in a row facing north. All of them earn different amount. Three persons are standing between L and F. O is standing immediately ahead of L. P is standing adjacent to F. Only two persons are standing between P and Z who is standing behind F. Only one person stands between Z and G. H is standing exactly behind G. Q is standing at one of the extreme end. Four persons are standing between Q and K. K is standing immediately behind L. Not more than 14 persons are standing in the row. C is standing immediately behind of T. X is standing behind V but ahead of M. M is not standing behind G.

The following information is given for the amount earn by them—
S@P means S earn 500 more than P.
S#P means S earn 1000 less than P.
S$P means S earn equal to P.
The amount earn by all of them is given below—
V@Z$H@X$QG, MF#G, V#L#T, T$C#O, F@K@P

41. What will be the sum of the amount earn by Q, Z and L if the amount earn by M is 7000?
(a) 24000 (b) 16000 (c) 14500
(d) 15000 (e) 26500

42. How many persons are standing ahead of V?
(a) Two (b) More than four
(c) Three (d) One (e) four

43. How many persons are standing between G and X?
(a) Two (b) More than three
(c) Three (d) One (e) None

44. What will be the difference of the amount earn by the one who earn highest and the one who earn lowest, if X earn 4500?
(a) 4000 (b) 6000 (c) 1500
(d) 1000 (e) 2500

45. What will be the amount earn by the one who is standing immediately ahead of C if K earns 5000?
(a) 4000 (b) 7500 (c) 11500
(d) 15000 (e) 9500

QUANTITATIVE APTITUDE

Directions (46-47): There are three series given in a question, you have to find value of x, y and z in each question and then establish relation among them.

46. 1, 601, 721, 751, (x), 766
753, 769, (y), 765, 763, 764
23, 24, 50, 153, (z), 3085
(a) x = y = z (b) x > y > z (c) x > y = z
(d) x = y > z (e) x = z > y

47. 102, 107, 117, 134, (x)
130, 115, 135, 110, (y)
(z), 80, 120, 300, 1050
(a) x > y = z (b) y < x = z (c) x = y = z
(d) y > x > z (e) x = z < y

Directions (48-50): Read the given information carefully and answer the following questions.

An apple pie of radius R cm has to cut into X identical pieces, area of each piece was 0.77 cm^2. But later on, it was found that 50% of pie was rotten so the remaining 50% was cut into (X –3) pieces with area of 0.616 cm^2 of each piece.

48. Find out the value of X.
(a) 10 (b) 12 (c) 8
(d) 6 (e) None of these

49. Find out the circumference of the original pie?
(a) $\frac{44}{25}$ cm (b) $\frac{88}{25}$ cm (c) $\frac{176}{25}$ cm
(d) $\frac{132}{25}$ cm (e) none of these

50. If initially, entire pie would have been cut into (X + 3) identical pieces then what would have been area of each piece?
(a) 0.64 cm^2 (b) 0.56 cm^2 (c) 0.28 cm^2
(d) 0.42 cm^2 (e) None of these

Directions (51-53): Given information represents number of people required for three different projects to be completed in various days.

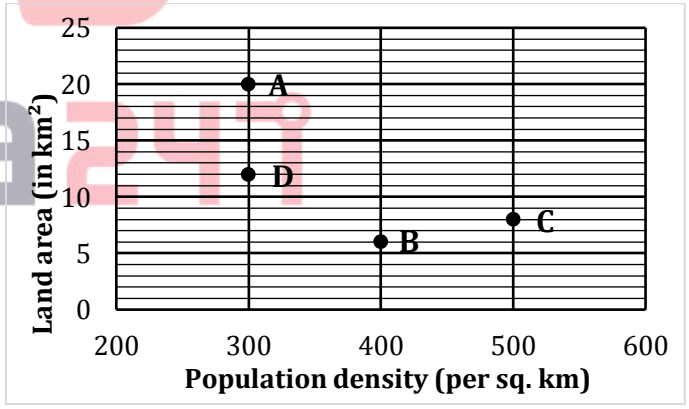
Project	Case 1		Case 2	
	Number of workers	Days required	Number of workers	Days required
A	X	88	X + 8	66
B	Y	Y–1	Y + 6	Y - 6
C	Z^2	75	M^2	108

51. If in team P, total number of workers= 0.5Z × 2M, then what is the number of days required by team P to complete project C?
(a) 75 days (b) 60 days (c) 90 days
(d) 80 days (e) None of these

52. If 64 people were working for Project A, then how many days did it take to complete the work?
(a) 44 days (b) 22 days (c) 33 days
(d) 36 days (e) None of these

53. If 0.5Y people work on Project B for 10 days and then 0.5Y more people joined the project, then how many days will it take to complete the Project B?
(a) 35 days (b) 40 days (c) 45 days
(d) 50 days (e) None of these

Directions (54-56): Study the following information carefully and answer the given questions. Given graph shows population density (in per Sq Km) and Land area (in sq km) of four different Villages A, B, C and D in the year 2001 are given.



(1) Population density = $\frac{\text{Total population of the village}}{\text{land area}}$

(2) Gender Ratio = $\frac{\text{Total number of males in a village}}{\text{Total number of female in a village}} \times 100$

54. Find gender Ratio of village A if the population of female in the village A is 2400?
(a) 120 (b) 150 (c) 90
(d) 180 (e) 144

55. If total number of female population in village A & C are equal and gender ratio of village A is 125 more than that of village C. Find number of males in village C.
(a) 2000 (b) 2500 (c) 2200
(d) 2400 (e) 2600

56. In 2001, ratio of total population of B to that of E is 1 : 4. If the population density of E increases by 50% in 2010 then find population of E in 2010 ?
(a) 14400 (b) 12000 (c) 16800
(d) 10000 (e) 15600

Directions (57-59): Study the following information carefully and answer the given questions. Given information are related and in sequence?

I. Bag X: There are total 30 red and green balls. Probability of choosing a red and a green ball out of total is $\frac{40}{87}$. Number of Red balls in the bag is (A).

II. (B) number of green balls are taken and after painting it red, placed back in to the bag X.

III. Probability of choosing two green balls from the bag X is $\frac{7}{29}$.

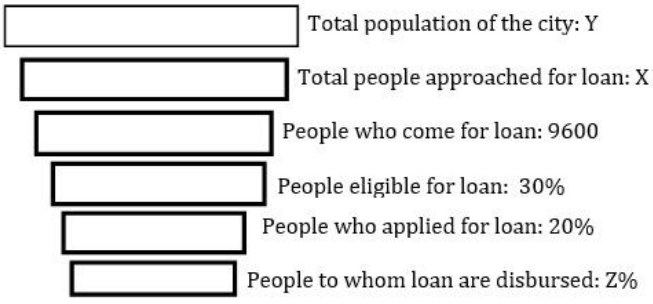
IV. Bag Y: All balls from bag X are taken and placed into bag Y. If (C) number of green balls are withdrawn from the bag and (C-5) number of red balls are added to the bag, then the probability of choosing two red balls from the bag is $\frac{2}{5}$.

57. Find the value of A?
(a) 10 (b) 15 (c) 12
(d) 18 (e) 20

58. Find the probability of choosing (B-3) green balls from bag X (Consider the initial number of red and green balls in the bag)?
(a) $\frac{35}{87}$ (b) $\frac{12}{29}$ (c) $\frac{40}{87}$
(d) $\frac{38}{87}$ (e) $\frac{34}{87}$

59. Find value of C?
(a) 5 (b) 6 (c) 4
(d) 7 (e) 3

Directions (60-62): Read the given information carefully and answer the following questions. This chart shows the various steps of loan disbursement i.e. from total population of the city to the number of people to whom loan are disbursed.



Note: All percentage values are given out of total people who are approached for loan.

60. If Number of people who applied for loan but to whom loan are not disbursed is 400 and the people who are not eligible for loan among those who come for loan is 3600. Then find the number of people to whom loan are disbursed?
(a) 3200 (b) 3500 (c) 3600
(d) 3000 (e) 2500

61. If the people who came for loan is 60% of total people approached for loan which is 40% of total population of city. The average of X, Y and Z is 20,000.Then, find people who are eligible for loan are what percent of Z?
(a) 105% (b) 110% (c) $112\frac{1}{2}\%$
(d) 116% (e) 120%

62. If 8400 people are approached but did not come for loan then 30% of the total population of the city will approached for loan, then find what percent of the people who are eligible but not applied for loan out of total population of the city?
(a) $2\frac{1}{2}\%$ (b) 3% (c) $3\frac{1}{2}\%$
(d) 4% (e) $4\frac{1}{2}\%$

63. A certain number of men can complete a task in two days earlier than some certain number of boys. Task completed by one man in one hour is same as the work completed by three boys in one hour.
Which one of the following ratios of number of men to number of boys can satisfy the above given condition?
(i) 1: 2 **(ii)** 2: 5
(iii) 2: 3 **(iv)** 16: 35
(a) only (ii)
(b) only (ii) and (iii)
(c) only (i) and (iii)
(d) All of the above
(e) only (ii), (iii) and (iv)

64. A vessel contains 400 liters of acid A and 80 liters of acid B. If _____ liters of mixture taken out from the vessel and _____ liters of acid B is added to the remaining mixture, then the final amount of acid A in the vessel becomes 250 liters more than the amount of acid B in it. Which of the following integral values given in the options are possible in the blanks in same order?
(A) (72, 22) (B) (60, 30) (C) (84, 24)
(D) (48, 38) (E) (36, 48)
(a) Only option A, B & D possible
(b) Only option B & D possible
(c) Only option A & E possible
(d) Only option B, D & E possible
(e) Only A, D & E possible

65. Marked price of an article is 40% above its cost price and when shopkeeper allows 'd'% discount then shopkeeper make a profit of _____% and when shopkeeper allows '2d'% discount then he make a profit of _____%. Which of the following options possible to fill both respective blanks?
(A) (22.5, 5) (B) (33, 26) (C) (19, 2)
(D) (26, 12) (E) (23.2, 6.4)

(a) Only option A, B, C possible
(b) Only option B, D & E possible
(c) Only option A, B, D & E possible
(d) All of above options are possible
(e) Only B, C, D & E possible

Direction (66-68): Read the given information carefully and answer the following questions.

Following paragraph shows the information about four students (A,B, C and D) who have attempted English exams. There are two types of questions i.e. Shorts questions and Long questions.

Short questions section:
I. Each question is of 5 marks.
II. Candidates have to attempt at least 6 out of every 7 questions.

Long questions section:
I. Each question is of 10 marks.
II. Candidates have to attempt at least 7 out of every 9 questions

Note: 0.5 marks will be deducted for each spelling error and 0.75 marks will be deducted if he forgot to write a whole word.

In this exam, there are total 42 short and 18 long questions. B corrects 14 long questions and obtained 131 marks whereas he obtained 175 marks in short section. Total marks obtained by A in short questions is 160 by attempting 38 questions. C attempted all the short questions and corrects as twice as number of questions correct in long section and got 150.5 marks in the long questions. D answered correctly 15 long questions and ratio of spelling errors in long to short section is 3:4.

66. If C did spelling mistakes and whole word mistakes in the ratio of 5:3 in the long question section then find marks obtained by him in short section if he did no spelling and whole word mistake?
(a) 170 (b) 150 (c) 155
(d) 160 (e) 180

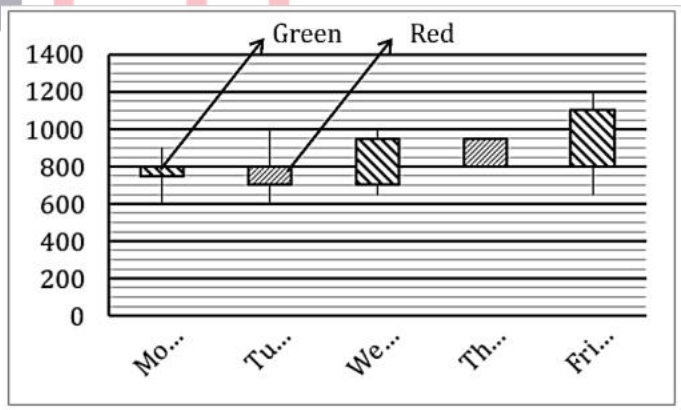
67. If A did 25% more spelling mistakes in long question than that of short and corrects 16 long questions and obtained 135 marks in it, then find how many questions are wrong in short section?
(a) 1 (b) 2 (c) 3
(d) 4 (e) 5

68. B did 43 spelling errors and 18 full word errors in short section while total number of spelling errors done by D is equal to the number of questions answered correctly by B. Find number of marks obtained by D in both section if he corrects 40 short questions?
(a) 318 (b) 322 (c) 329
(d) 309 (e) 315

69. X & Y are two integers then,is X> Y?
I. $(X-Y)^a > (X-Y)^b$, where a & b are two natural numbers and a > b.
II. $X^p > Y^q$, where p & q are two consecutive even numbers and q < p.
(a) Statement (I) alone is sufficient to answer the question but statement (II) alone is not sufficient to answer the questions.
(b) Statement (II) alone is sufficient to answer the question but statement (I) alone is not sufficient to answer the question.
(c) Both the statements taken together are necessary to answer the questions, but neither of the statements alone is sufficient to answer the question.
(d) Either statement (I) or statement (II) by itself is sufficient to answer the question.
(e) Statements (I) and (II) taken together are not sufficient to answer the question

70. Bharat and Ekta started a business together. 'Bharat' invested for 11 months while 'Ekta' invested for 12 months. Out of total profit 20% is given to 'Bharat' as an active partner and remaining is distributed between 'Bharat' and 'Ekta' according to their investments. At last profit share of Bharat and Ekta is equal. If initial investment of 'Bharat' is Rs. 6,000, then find initial investment of 'Ekta'?
(a) Rs. 9,750 (b) Rs. 11,250 (c) Rs. 13,750
(d) Rs. 12,500 (e) none of these.

Directions (71-74): Study the chart given below carefully and answer the following questions.
OHLC (Open-High-Low-Close) chart given below shows data regarding trading in stock of company – X on 5 different days.



[**NOTE: 1.** Red Candle – Top end & bottom end represents opening & closing value of the share respectively of a particular day.
2. Green Candle – Top end & bottom end represents closing & opening value of the share respectively of a particular day.
3. Vertical line represents highest & lowest value of the share of a particular day.]

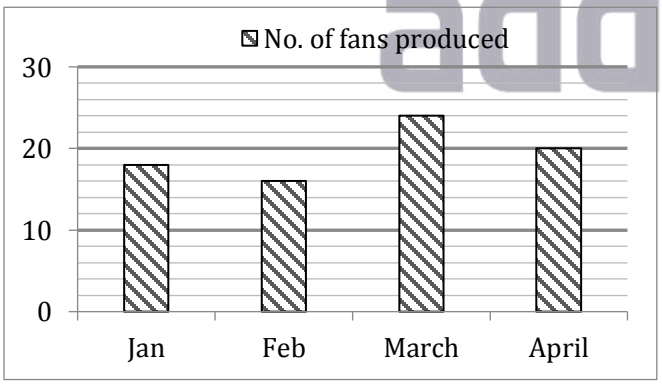
71. For how many instances in graph, the difference between opening value & highest value of the stock for the day is more than $23\frac{4}{9}\%$ theopening value of stock of that day?
(a) 1 (b) 2 (c) 3
(d) 4 (e) 5

72. An individual purchased 1234 units of share at lowest price of day on Monday and sold them on Thursday at highest price of that day, then find the difference in profit/loss % if he sells his entire stock on Friday at closing price instead of Thursday?
(a) 75% (b) 50% (c) 30%
(d) 60% (e) 25%

73. If an individual sells an equal amount of share on Monday at lowest price, Tuesday at closing price, Wednesday at highest price, Thursday at lowest price and Friday at highest price then on which day the profit obtained was maximum? (On each day shares were purchased at opening price of that day)
(a) Monday (b) Tuesday (c) Wednesday
(d) Thursday (e) Friday

74. On which day the difference between the opening value of each unit of share and the lowest value of each unit of share for that day is the lowest?
(a) Monday (b) Tuesday (c) Wednesday
(d) Thursday (e) Friday

Directions (75-78): Bar graph shows the number of fans produced (in hundreds) by a manufacturer in the period of four months i.e. from January to April.



Shopkeeper has to decide whether to test or not all the units of fans before sending them to the customer. If he has decided to test he has two options.
(a) Option I
(b) Option II
Option I:- It cost Rs 2.50 per unit as testing cost but this method of testing allows 30% of defective fans to pass to the customer.
Option II:- It cost Rs 4 per unit as testing cost and it find 90% of defective units
→ All defective units identified at the customer end, will causes a penalty of Rs 60 per units. Which are to be paid by shopkeeper. Defective units found during testing are repaired at Rs 20 per unit.

75. Shopkeeper uses option I testing in March month and incurs repairing cost of. Rs 5600. Then find number of defective fans in March is what percent of total manufactured fans in that month?
(a) $12\frac{1}{2}\%$ (b) 15% (c) $16\frac{2}{3}\%$
(d) $17\frac{1}{2}\%$ (e) 20%

76. For February month, find the difference of the extra (i.e. total of testing ,repairing cost and penalties) incurred by the shopkeeper. For the both options if 150 units are defective in that months.
(a) Rs 1000 (b) Rs 1200 (c) Rs 1250
(d) Rs 1400 (e) Rs 1350

77. Find ratio of all defective units of January to April months if in January he uses option I for testing and in April, option II as testing. Repairing cost of April is Rs 5300 more than that of Jnuary where as penalties for January is Rs 900 more than that of April
(a) 3 : 8 (b) 2 : 5 (c) 11 : 18
(d) 4 : 9 (e) 8 : 15

78. In May, shopkeeper uses option II for testing the whole units of fans produced and he has to pay penalties of Rs 1620 to the customer. Then, find the total units of fans manufactured in that month if total defective units are $25\frac{5}{7}\%$ in that month.
(a) 980 (b) 1050 (c) 1071
(d) 1106 (e) 1120

79. The number of girls in the college was 50 less than the number of boys in that college. Subsequently, a few number of girls joined that college and the ratio of boys and girls become 2 : 5. Find the minimum number of girls who joined college recently (Number of boys and girls are positive integer).
(a) 116 (b) 120 (c) 124
(d) 128 (e) 136

80. Two types of ornaments are prepared by using gold and copper in two different proportions. In first ornaments, 6 gram gold is mixed with 5 gram copper and in second ornament 5 gram gold is mixed with 3 gram copper. If total quantity of gold and copper is122 gram and 90 gram respectively then how many ornaments are prepared of second type?(total gold and copper are used)
(a) 15 (b) 10 (c) 7
(d) 20 (e) 9

ENGLISH LANGUAGE

Directions (81-85): Given below are four sentences which are divided into several parts. Answer the following questions based on these given statements.

(A) for power evacuation, the White Paper added (1)/ build compared to three to four years for (2)/ construction of transmission lines required (3)/ Traditional coal-fired power plants took 5-6 years to (4)

(B) process and forest clearance procedures (1)/will need to be adopted while (2)/preserving the integrity of the original process to develop the transport system (3) /more efficient modalities of the bidding (4)

(C) Points that the government must work on to enhance the (1)/transmission sector in line with the (2)/the White Paper goes on to enumerate several action (3)/ growth of the economy that is envisaged (4)

(D) Investment of about ₹5 lakh crore in the power transmission sector over (1)/ one of the key requirements for a $5-trillion economy is an (2)/ by the Confederation of Indian Industry (CII) (3)/the next few years, according to a White Paper released (4)/

81. Which of the following is the correct sequence of the rearrangement of the sentence (A)?
(a) 1432 (b) 4123 (c) 4231
(d) 3412 (e) None of these.

82. Which of the following is the correct sequence of the rearrangement of the sentence (D)?
(a) 1432 (b) 2143 (c) 4213
(d) 4231 (e) None of these.

83. Which of the following is the correct sequence of the rearrangement of the sentence (B)?
(a) 4123 (b) 2143 (c) 4231
(d) 3412 (e) None of these.

84. Which of the following is the correct sequence of the rearrangement of the sentence (C)?
(a) 1432 (b) 3142 (c) 2413
(d) 3124 (e) None of these.

85. Rearrange the given four sentences in the proper sequence to form a meaningful paragraph and also choose the one which doesn't match the theme of the passage so formed.
(a) DBA; C (b) DCA; B (c) BDC; A
(d) ACD; B (e) None of these.

Directions (86-90): In the questions below a statement is given with two blanks in it. For each blank three alternatives are provided in the columns. Choose the alternative from the corresponding column that would fit the give blanks to make the given sentence grammatically correct and contextually meaningful.

86. The Finance Secretary said that one of the_____[I] that the Reserve Bank of India's rate cuts were not being transmitted by the banks was because they didn't have enough liquidity left to _____[II] lend to the private sector after accommodating government borrowing

[I]	[II]	
(A) Reasons	(D) Impingement	
(B) Crunches	(E) Distinguish	
(C) Sanctions	(F) Adequately	
(a) B-E	(b) C-D	(c) A-F
(d) C-F	(e) A-E	

87. Department of Commerce is pro-actively pursuing an export promotion strategy involving _____[I] engagement with the EPCs and exporters to quickly address domestic and overseas constraints _____[II] exports.

[I]	[II]	
(A) Deter	(D) Debilitating	
(B) Ripen	(E) Impacting	
(C) Conscious	(F) Unsparing	
(a) B-D	(b) C-E	(c) A-F
(d) C-F	(e) A-D	

88. A series of braking mechanisms will be needed to _____[I]_____ reduce the velocity of the Vikram lander from nearly 6,000 km an hour, to _____[II] that the touchdown is soft.

[I]	[II]	
(A) Drastically	(D) Hauled	
(B) Eloquently	(E) Ensure	
(C) Unravelling	(F) Prone	
(a) B-D	(b) C-E	(c) A-F
(d) C-F	(e) A-E	

89. Astronomers frequently observe mergers between distant galaxies, but it's _____[I]_____ to reconstruct the interactions that defined the _____[II]_____ Milky Way in part because we lack an outside perspective of our own galaxy.

[I]	[II]	
(A) Trickier	(D) Influence	
(B) Assiduity	(E) Modern	
(C) Reprobate	(F) Devious	
(a) B-D	(b) C-E	(c) A-E
(d) C-F	(e) A-D	

90. "Increasing urbanisation, evolving demographics, expanding renewables and changing market dynamics have placed _____[I]_____ pressure on utilities to solve energy-delivery challenges in an economical manner in the shortest possible time with minimum _____[II] ," the paper said.

[I]	[II]	
(A) Altercate	(D) Disruption	
(B) Duping	(E) Protract	
(C) Extraordinary	(F) Perspicuous	
(a) B-E	(b) C-E	(c) A-F
(d) C-F	(e) C-D	

Directions (91-93): Read the given passage and answer the following questions based on the passage.

Iran's decision to reduce its commitments under the 2015 Joint Comprehensive Plan of Action, which sought to curtail its nuclear capabilities, is more of a warning than a move to break the nuclear deal. Iran has been under economic and political pressure since President Donald Trump pulled the U.S. out of the deal a year ago. The U.S. has since amped up its anti-Iran rhetoric and reimposed sanctions. While President Hassan Rouhani clinched the agreement in 2015 despite opposition from hardliners, his promise was that it would help lift sanctions, providing relief to Iran's economy. But the economic benefits did not last even three years, weakening Mr. Rouhani's position in Iran's complex power dynamics. With the U.S. having ended the sanctions-waiver it had given to certain countries, including India, on purchasing Iranian oil, from the first week of May, the Iranian economy has come under more pressure. It is in this context that Mr. Rouhani announced the suspension of some of the restrictions in the deal.

Iran will immediately stop shipping out excess enriched uranium and heavy water. Mr. Rouhani has given 60 days to other signatories to find solutions to shield Iran's banking and oil sectors from U.S. sanctions. In theory, excess enriched uranium and heavy water allows Iran to expand its nuclear programme, but it hasn't announced any such plan. The big threat is that it will resume higher levels of enrichment to build weapons unless its grievances are addressed in 60 days. Iran's response may appear to be calibrated. It hasn't quit the deal as the U.S. did. And its concerns are genuine as it is being punished even as it is compliant with the terms of the agreement. But Iran's move to put the remaining signatories on notice could be the start of the formal unravelling of the deal. European countries have been working on a mechanism, which is still in the initial stages, that allows Europe to trade with Iran through a barter system avoiding the dollar and circumventing sanctions. But it hasn't covered oil trade, the mainstay of Iran's economy. If Europe doesn't do enough in 60 days and Iran sticks to its threat, the deal will collapse, giving more reason to the U.S. to escalate hostilities. It has, among other things, deployed an aircraft carrier and a bomber squad to the Gulf. A practical alternative would be for Iran to end this brinkmanship and (A) . Europe, on its part, should stand firmly up to the U.S.'s unilateral threats and pressure, and come up with ways to help Iran. A collapse of the deal would not only exacerbate the Iran nuclear crisis but also set a bad precedent in international diplomacy.

91. As per the passage, why did the President of Iran signed the agreement?
(a) The president had to sign the deal because of the pressure from the States and the country's population.
(b) The president had confidence that by signing the deal the sanctions over the country would be removed, thus improving the economy of the country.
(c) Signing of the deal would help the nation to export the oil and the nuclear weapons easily.
(d) Both (b) and (c)
(e) None of these

92. As per the passage, what is the alternative that European nations are trying to work on to deal with Iran?
(a) The currency used for trading is being changed to European Peso from the US dollar.
(b) Europe is trying to build a mechanism in which the trade would be done using the Barter system rather than the use of dollar.
(c) Europe is building a corridor to Iran to trade directly with Iran and circumventing sanctions.
(d) Europe has agreed to provide the additional budget required by Iran to build the nuclear weapons.
(e) None of these

93. Which of the following phrase would be used in (A) to form a contextually and grammatically correct sentence?
(a) some mechanical skill could carry out.
(b) That would cut off access to about a fifth of the world's oil and a quarter of its natural gas
(c) threaten to pull the UK and the international community into the escalating friction between Washington and Tehran
(d) deepen cooperation with other signatories instead of breaking the deal
(e) None of these

Directions (94-97): Read the given passage and answer the following questions based on the passage.

In an earlier column on what India needs to do to become a proper space power, I argued that we must ramp up both our capacity to use space and our capacity to deny our adversaries the reliable use of space. Other spacefaring nations are investing good money in both these, with the bulk of the investment going into enhancing their capacity to use space. What is striking about their approach compared to ours is the involvement of the private sector in the commercial use of space.
Indeed, it is ironic that India—whose space-faring tradition is decidedly in the service of human development—is lagging in harnessing the power of private innovation in the space domain. This not only limits the exploitation of space for economic development, but has serious national security implications. The most basic way to secure our space capabilities is to distribute them across many different satellites and spacecraft, so that business continuity is unaffected even if an adversary manages to disable one or more of our satellites. The more critical the function, the more the diversity required. The US is highly vulnerable in space because it depends on thousands of its satellites. But it is also best equipped to deal with a potential attack on its space assets because it can find alternatives to switch to. Furthermore, with private US firms set to put thousands of satellites into orbit

in the next few years, its security in space will improve. Similarly, China is significantly increasing the number of its active space assets through massive public investment as well as opening its skies to private entrepreneurs.

In this new space economy, India is playing with one hand tied firmly behind its back. While the Indian Space Research Organization (ISRO) is continuing on a successful path, there is no one at the private-sector end of the business. So, we must deregulate the space sector and create an environment for private industry to serve India's commercial and strategic needs, and perhaps become a global space technology hub.

94. As per the passage, how can India fight against the vulnerabilities in the space?
(a) India can take help from NASA and build strong spacecraft and satellites.
(b) India can decentralise its space capabilities among various satellites and spacecraft in order to maintain the business continuity.
(c) The government needs to provide ISRO with more budget and more resources so that the space missions can be completed effectively and efficiently.
(d) Both (b) and (c)
(e) None of these

95. As per the passage, which of the following sentence depicts the meaning of the phrase 'playing with one hand tied behind ones back' as used in the passage?
(a) In this new space economy, India has the monopoly and there is no competition.
(b) In this new space economy, India is playing with only one hand.
(c) In this new space economy, India is playing very easily and not paying attention.
(d) In this new space economy, India is not using all the resources that it has.
(e) None of these

96. As per the passage, which of the following sentence is TRUE?
(a) The government is raising ISRO's budget and encouraging it to take up missions that push the technological frontiers.
(b) Private space companies in nominally-Communist China have attracted more than half a billion dollars in investment since 2016.
(c) India needs to increase its capacity to use space and should try to deny its nemesis the reliable use of space.
(d) Both (a) and (c)
(e) All are true

97. What can be inferred from the given passage?
(a) ISRO has burned more midnight oil than public money in its quest for a greater understanding of the shiny orb that has waxed and waned in our night sky from time immemorial.
(b) ISRO's success shows that the public sector is not the arid wasteland of squandered resources many market fundamentalists like to portray it as.
(c) The country must deregulate the space sector to encourage private enterprise if we are to compete in the new space economy.
(d) India's avowed aim to pursue space research for the expansion of human knowledge got a mega lift as its second lunar mission got underway.
(e) None of these

Directions (98-101): Read the given passage and answer the following questions based on the passage.

On Wednesday, the government said it would amend the 2016 insolvency law, a signature reform of Prime Minister Narendra Modi's first term. Investors will cheer.

The legislation was getting mired in frustrating legal delays and bizarre judgments, threatening to scare off global investors from a $200-billion-plus bad-debt cleanup. The last straw was the recent order by the insolvency tribunal judges in the $6 billion sale of Essar Steel India Ltd. to ArcelorMittal. The judges ruled that secured creditors would have no seniority over unsecured creditors and suppliers.

As I have noted, the order would have reduced an assured 92% recovery rate for financial lenders to just 61%. While it has already been appealed by State Bank of India and other lenders in India's Supreme Court, it's helpful that the government has decided to get off the sidelines. If the top court had upheld the tribunal's verdict – on the grounds that the law wasn't clear about how sale proceeds would be divided – banks would have had to kiss goodbye to substantial recoveries, step up bad-loan provisions and push more salvageable debtors into liquidation, leading to unnecessary job losses. New Delhi had no option but to step in before the July 22 court hearing.
The tweak it proposes "to fill critical gaps in the corporate insolvency resolution process" will explicitly hand power over distribution of proceeds to creditors' committees. That should return some common sense to a process that would have required financial creditors to share the money from any new buyer of a bankrupt business equally with miscellaneous suppliers and other unsecured lenders.

As for urgency, delay tactics by large business families loath to lose their prized assets have pushed bad- debt resolutions such as Essar to more than 600 days; the intent was to wrap up cases in 270 days. Now the Modi government wants the clock to keep ticking even during appeals. Cases have to be admitted speedily and concluded in 330 days flat.

98. As per the passage, what would have been the effects of the decision of the tribunal judges over the banks?
(a) The usable assets and resources would be swiftly redeployed to the banks and the lenders.
(b) The recoveries of the loan provided by the banks would be far-fetched idea leading to the liquidation of debtors.
(c) The banks would need to seek the permission from the government before lending the loans to the corporates and the businesses.
(d) Both (b) and (c)
(e) None of these

99. As per the passage, how was the money distributed among the creditors after the insolvency of the corporation?
(a) Unnecessary intervention of the banks would lead to the division of money among the shareholders and the board of directors.
(b) The money would be deployed to the highest bidder and remaining would be kept by the banks.
(c) The money would be shared equally among the sundry suppliers and the unsecured lenders.
(d) Both (a) and (b)
(e) None of these

100. As per the passage, which of the following sentence depicts the meaning of the phrase 'getting mired in' as used in the passage?
(I) The legislation was getting bogged down in frustrating legal delays and bizarre judgments.
(II) The legislation was getting tangled in frustrating legal delays and bizarre judgments.
(III) The legislation was getting adjusted in the frustrating legal delays and bizarre judgments
(a) Only (III)
(b) Only (II)
(c) Both (I) and (II)
(d) Both (II) and (III)
(e) All of the above

101. What can be inferred from the given passage?
(a) The government's proposed changes to the 2016 insolvency law are bold, practical and badly needed
(b) Foreign investors in India's still-nascent market for impaired debt were stunned by the tribunal's order.
(c) The Union cabinet's approval of amendments to the Insolvency and Bankruptcy Code (IBC) to enhance its efficacy could bring relief to banks.
(d) Both (a) and (c)
(e) None of these

Directions (102-104): Read the following passage and answer the following questions based on the given passage.

As India gears up to become a 3-trillion-dollar economy in the current year and a 5-trillion economy by the year 2024, all major powers of the world compete to announce the development of relations with India to be one of their main priorities. In the meantime, time-tested friends and allies, Russia and India, are making a fresh and substantiated effort of bringing the scale of their economic cooperation up to the level adequate to their enhanced political partnership. Removal of bottlenecks and obstacles to bilateral trade and investments being the current priority for both sides. One of the main constraints in trade between Russia and India is the lack of smooth independent banking infrastructure connecting the two countries. Russian- Indian trade turnover now stands at approximately 10 bln USD, with the governments of both countries confident that it has the potential to triple to 30 bln USD by the year 2025. Mutual investments can reach a level of 15 bln USD. Provided financial systems of both countries are ready for the challenge.

Russia is India's leading partner in defence supplies: over 60% of all India's purchases are coming from Russia. With large recent deals, such as the procurement of S-400 missile defence systems (estimated cost over 6 bln USD), this share is likely to grow. Although India aims to diversify its' defence supplies and localize development and production, Indian officials have iterated consistently that India's relations with Russia in the sphere of defence will remain a priority despite the unprecedented pressure coming from the West. Russia sees these policies on behalf of its' Western partners as a manifestation of an unfair competition aimed at ousting Russia from international markets – be it defence equipment, energy or expertise. Defence-related deals between Russia and India have demonstrated the vulnerability of the existing banking mechanisms of the two countries to third party actions. With US dollar payments put on hold in 2018, India and Russia had to urgently look for alternative solutions. Options on the table included coming back to trading in rupees and roubles, in euros, Singaporean dollars, etc. Importantly, this situation attracted the attention of bankers and decision-makers on both sides to the issue of payments. Memories of lucrative trade between India and the Soviet Union conducted in national currencies run deep and this mechanism cannot be excluded from the list of alternatives entirely. However, it is obvious that the world has changed, it is immensely more interdependent and connected today than in the times of the Soviet Union and this type of trading mechanisms a limitation to globalised business actors on both sides.

102. As per the information given in the passage above, what has been the primary impediment in India-Russia trade?
(a) Indian government may be susceptible to fall prey to any external restrictions.
(b) Engagement of the countries which are equally interested in extending their trade and business networks
(c) List of companies and persons under restrictions can be extended at any moment.
(d) Paucity of independent banking infrastructure connecting India and Russia.
(e) None of these

103. What has been the issue that has attracted attention of banking officials in India and Russia?
(a) Use of an efficient platform and trusted financial interaction for a large number of actors globally.
(b) Finding alternative to payments as US Dollar payments have been put on hold.
(c) Russian banks are ever denied access to global system of financial messages.
(d) Increased transparency and centralization of the international banking system.
(e) Set the international trends in financial solutions.

104. What has been India's stance as stated in the passage given with regard to trade with Russia?
(a) Development of an alternative trade partner is important and it is underway.
(b) India and Russia have a unique opportunity to shape the future of global trade.
(c) Cooperation in innovative technology and digital transformation.
(d) The defence relations with Russia will not be affected despite pressure from west.
(e) None of these

Directions (105-108): Given below are the sentences with a phrase given in bold. Choose the correct phrase from the options which might replace the highlighted phrase to make the statement grammatically correct and contextually meaningful. If the highlighted phrase is correct, choose option (e) as your answer.

105. In Thomas Walker's harpoon or frictionless log, introduced in 1861, the wheelwork was enclosed in a cylindrical case of the same diameter as the body of the rotator or fan, and the latter was brought rattle off to the register, forming a compact machine and avoiding the use of the 6-ft.
(a) pass off (b) close up (c) queer up
(d) clear off (e) no replacement required

106. The cabinet minister who palmed off his civil service team in front of a large audience after a paper required for a legislation committee had gone missing.
(a) marked out (b) packed away (c) bawled out
(d) max out (e) no replacement required

107. Given the pressure on CSPs to latch on margins, the router economics provided with this solution are most likely compelling enough for organizations to take a look.
(a) lash out (b) hook up (c) claw back
(d) knuckle under (e) no replacement required

108. The two then went head to head and nose to nose, even making contact with one another and continuing to jam on before eventually being separated and given offsetting technical fouls for their trouble.
(a) keel over (b) jazz up (c) jerk around
(d) jaw away (e) no replacement required

Directions (109-112): Read the following passage and answer the following questions based on the given passage.

The Central Pollution Control Board (CPCB) has put 52 producers, brand owners and importers, including big online retailers such as Amazon and Flipkart, and companies such as Patanjali Ayurved and Britannia, on notice, for failing to take responsibility for their plastic waste. These and other entities with a large plastic footprint need to respond with alacrity. It is eight years since the concept of Extended Producer Responsibility (EPR) was incorporated into the Plastic Waste Management Rules, but municipal and pollution control authorities have failed to persuade commercial giants to put in place a system to collect and process the waste. Tighter rules in 2016 and some amendments two years later put the onus on producers and brand owners to come up with an action plan for the retrieval of waste within six months to a year, but that too failed to take off. Mountains of garbage with a heavy plastic load have been growing in suburban landfills, out of sight of city dwellers. Without determined steps, the crisis is certain to worsen. It should be noted that the retail sector expects e-commerce to grow from about $38.5 billion-equivalent in 2017 to $200 billion by 2026. Given the role played by packaging, the waste management problem is likely to become alarming. There is also a big opportunity here, which the trade, municipal governments and pollution control authorities need to see. The two prongs of the solution are packaging innovation that reduces its use by using alternatives, and increasing the process of separation, collection and dissemination of waste. Recovering materials from garbage should be a high priority, considering that India is the third highest consumer of materials after China and the U.S.; the Economic Survey 2019 estimates that India's demand for total material will double by 2030 at current rates of growth. Plastics may be less expensive than other inputs in manufacturing, but recycling them into new products extends their life and provides a substitute for virgin material. Keeping them out of the environment reduces clean-up and pollution costs. Unfortunately, in spite of legal requirements, municipal and pollution control authorities fail to see this and mostly pursue business-as-usual waste management methods.

109. As per the information provided in the passage, what might be the possible reason for the colossal use of plastics in packaging?
(a) they are shatterproof and does not fragment into dangerous shards
(b) they are low in weight but high in strength
(c) make the manufacturing process economical
(d) can be produced and used with tamper-evident
(e) None of these

110. What have been the measures suggested in the above passage for combating plastic pollution?
(a) introducing or supporting legislation that would make plastic-bag use less desirable
(b) switching to substitutes for packaging materials
(c) upscaling waste segregation, collection and transmission
(d) Both (b) & (c)
(e) All (a), (b), (c)

111. What can be the possible inference drawn from the passage given above?
(a) Plant-based plastics, especially varieties made from sugar cane, are starting to seep into the mainstream.
(b) Recycling is integral to addressing the problems posed by plastic packaging material.
(c) Urban habitats are particularly at risk from plastic litter.
(d) Every day our environment is being threatened by endless plastic pollution in the ocean.
(e) Reckless tourism is adding to the plastic burden of the country.

112. What has been the flaw mentioned on the part of civic bodies in controlling pollution from plastic packaging?
(a) Recyclable waste is rendered useless as it gets mixed with other articles.
(b) Municipal and pollution control bodies have not been held accountable for growing plastic pollution.
(c) Civic bodies have been unsuccessful in convincing corporate giants to accumulate and process the waste.
(d) Owing to lenient control by authorities plastics pollution has resulted in choked landfills, drains and rivers and flows into the sea.
(e) India being one of the most populous countries, authorities have failed to adjust the pollution levels with the demographic structure.

Directions (113-115): Read the following passage and answer the following questions based on the given passage.

India's economic fortunes continue to be tied to the sharply fluctuating price of oil. At a gathering of prominent oil ministers in New Delhi on Monday, Prime Minister Narendra Modi urged oil-producing countries to reduce the cost of energy in order to aid the global economy in its path towards recovery. Mr. Modi also called for a review of payment terms, demanding the partial use of the rupee instead of the U.S. dollar to pay for oil, in order to ease the burden on oil-importing countries in the wake of the strengthening of the dollar. With well over 80% of its oil demand being met through imports, India clearly has a lot at stake as oil prices have risen by as much as 70% in rupee terms in the last one year. Notably, speaking at the same event, Saudi Arabian Energy Minister Khalid A. Al-Falih refused to openly commit to lower oil prices, opting instead to say that the price of oil could have been much higher but for the efforts taken by his country to boost supply. This is not surprising given the absence of significant rival suppliers in the global oil market willing to help out India. India's policymakers now face the difficult task of safely steering the economy in the midst of multiple external headwinds. For one, the current account deficit widened to 2.4% of gross domestic product in the first quarter of 2018-19 and is expected to reach 3% for the full year. The rupee, which is down about 16% since the beginning of the year, doesn't seem to be showing any signs of recovery either. Further, the growth in the sales of petrol and diesel has already been affected adversely as their prices have shot through the roof. All this will likely weigh negatively on the prospects of the Indian economy, the world's fastest-growing, in the coming quarters. In this scenario, the decision to marginally cut taxes imposed on domestic fuels is unlikely to be of any significant help to consumers. What is required is a steep cut in Central and State taxes for the benefit to carry through to the consumers, which, of course, is unlikely given the government's fiscal needs.

113. What are the factors mentioned in the passage which have hampered India's growth prospects?
(i) prices of energy have shot the roof
(ii) amplified current account deficit
(iii) tumbling value of rupee
(a) Both (i) & (ii)
(b) Both (i) & (iii)
(c) Only (i)
(d) All (i), (ii), (iii)
(e) None of these

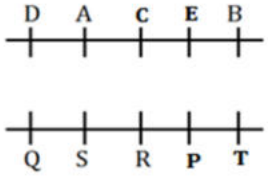
114. How has Saudi Arabia replied diplomatically to PM Modi's proposal for reduction of oil prices?
(a) Saudi Arabian Energy Minister has mentioned that while supply and demand affect oil prices, it is actually oil futures that set the price of oil
(b) Once the supply of cheap oil is exhausted, the price could conceivably rise if the only remaining oil is in the tar sands.
(c) They have refused to commit to lower prices and have instead signaled towards higher prices if the country didn't want to boost its supply.
(d) The Saudi Arabian official had stated that with so much oversupply in the industry, a decline in production decreases overall supply and increases prices.
(e) None of these

115. What were the requests tabled by PM Narendra Modi in the meeting of oil ministers in the capital?
(a) To succor the global economy, the oil producing countries should taper the oil prices.
(b) Intact use of rupee for payments by oil-importing countries to support the robustness of dollar
(c) Qualified use of rupee to truncate the strength of dollar
(d) Both (a) & (c)
(e) Both (a) & (b)

Solutions

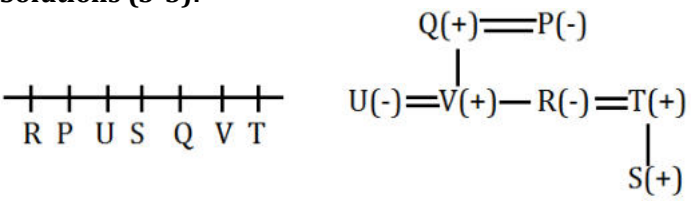
REASONING ABILITY

Solutions (1-2):



1. **(e);**
2. **(b);**

Solutions (3-5):

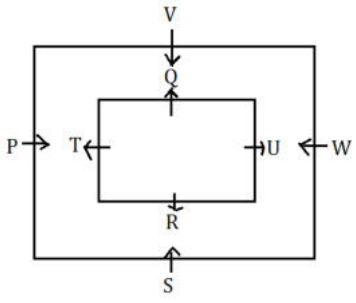


3. **(c);** 4. **(c);** 5. **(a);**

Solutions (6-9): Logic: Step I: 1st digit is replaced by 6th digit, 2nd digit is replaced by 5th digit and so on until 6th digit is replaced by 1st digit in each number.
Step II: numbers are arranged in ascending order from left to right
Step III: first arranged odd digits then even digits in ascending order in each number.
Step IV: multiplied 1st and 2nd digit, 3rd and 4th digit, 5th and 6th digit in each number.
Step V: total sum of the numerical value of all digits in each number.
Input: 856347 745982 329584 512379 954267 463512
Step I: 743658 289547 485923 973215 762459 215364
Step II: 215364 289547 485923 743658 762459 973215
Step III: 135246 579248 359248 357468 579246 135792
Step IV: 31024 351832 151832 152848 351824 33518
Step V: 10 22 20 28 23 20

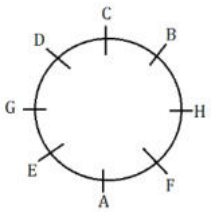
6. **(c);** 7. **(e);** 8. **(b);**
9. **(d);**

Solutions (10-12):



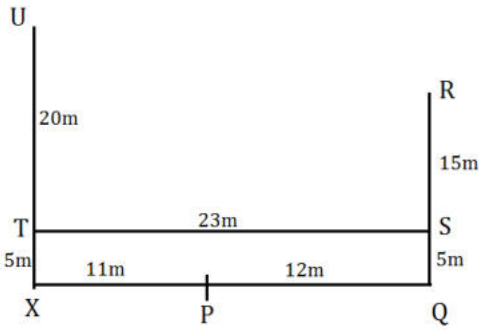
10. **(c);** 11. **(d);** 12. **(a);**

Solutions (13-14):



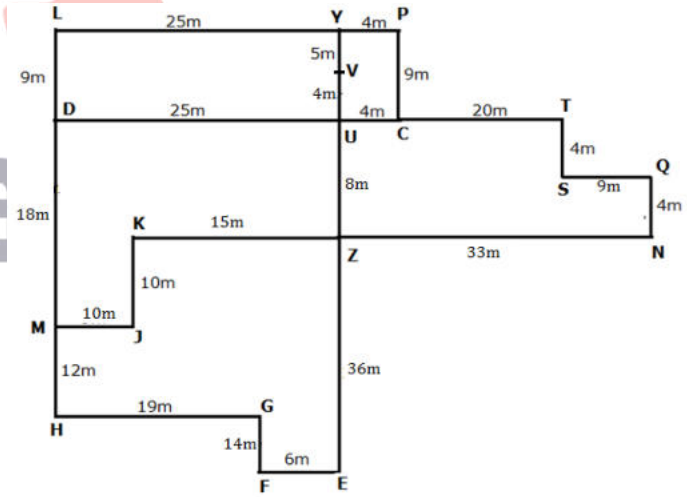
13. **(a);** 14. **(c);**

Solutions (15-16):



15. **(d);** 16. **(c);**

Solutions (17-18):



17. **(a);** 18. **(c);**

Solutions (19-21): Alphabets- third letter from the right end of the given word.
Number- If the number of letters in the given word is odd then subtract three from the number and If the number of letters in the given word is Even then add four from the number.
First letter of each word represents specific symbols as below-

words	W	M	S	R	E	P	T	F
code	!	$	#	^	+	%	~	@

Example: World – 2 ! R

19. (a); 20. (e); 21. (c);

22. (d); For I- Statement I weaken the given statement as according to it large number of people migrating to urban areas for better job opportunities whereas the given statement suggests that people are willing to compromise on their standard of living in order to live in a healthier/pollution free environment
For II- Statement II weaken the given statement as according to it migration from the rural areas is increasing whereas according to the statement, more and more people are willing to migrate to rural/semi-urban areas.
For III- Statement III strengthens the statement is it states that there has been a decline in number of migrants but it is due to the poor condition of urban slum areas, mostly acquired by the migrants and because of the policies of the government.

23. (e); As all options other than (e) can be the reason of the downfall of the revenue of a company but option (e) cannot be a reason as nothing regarding the Chinese/Indian companies have been stated in the given statement and is not related with the downfall of revenue of company A.

24. (a); Only I weakens the given statements as the statement suggest that the today's children are weaker than previous generation and are not as much active and also lack in developing their personality whereas the statement I states that today's children are mentally more active so it weakens the given statement.

25. (a); (a) mention a flaw in the survey which weakens the conclusion drawn from it.
(b) supports the statement by pointing out that some people embrace religion to achieve financial success.
(c) poor people might not have enough time to engage in religious practices but it does not eliminate the possibility of them having religious beliefs.
(d) mentions a fact which is irrelevant as the given statement talks about the general population of financially successful people which includes both developed and developing countries.
(e) is irrelevant to the statement.

26. (d); All the statement except (d), cannot be assumed from the given statement as data provided in the statement is not enough to assume the increase or decrease in NPA from the previous year also it is not clear whether NPA is the only cause of pain to banking sector. Further we also cannot assume from the given statement that steps taken by the government are not enough or some other sector is performing better than it. But it can be clearly assumed from the given statement that after the proper implementation of the policies and reforms there will be some improvement in the condition of the banking sector.

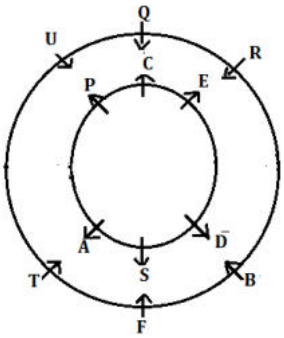
27. (a); Only statement (a) can be deduced from the given statement as by burning the coal the concentration of its particles is increased which lead to excessive amount of air pollution. But for others (b) and (e) can be assumed but cannot be deduced. While for (c) and (d) the amount of average rainfall and its consistency in not directly given in the statement.

28. (e); Except (e), all the statement strengthens the given statement by pointing out the effects of water scarcity India is currently facing and problems related to it but option (e) states that the crisis was more in 1960 from now which contradicts the given statement as it states that India is facing its "worst" water crisis in history. So (e) weakens the given statement.

29. (e); Statement (e), can be assumed from the given statement as better quality is always a major factor of concern for customers and for it paying a bit higher amount is convenient. All other option except (e) cannot be assumed quality and price offered by company V for the product is not mention in the given statement. And also quality is only parameter to increase the number of customer or it is the only way also cannot be hypothesized from the given statement.

30. (c); Only statement I can be inferred from the given statement as HRA allowance increase after reallocation which clearly indicates that both are directly related to each other. But II and III cannot be inferred as we cannot state that strike is the reason behind the rise in allowance. And also increase in profit cannot be a factor to increase the allowance which the statement also states that the decision has been taken after the reallocation.

Solutions (31-35):



31. (c); 32. (a); 33. (e);
34. (a); 35. (d);

Solutions (36-40):

	Case 2		
Floors	Flat A	Flat B	Flat C
3	4 rooms	6 rooms	10 rooms
2	3 rooms	7 rooms	5 rooms
1	2 rooms	9 rooms	8 rooms

36. (b); 37. (c); 38. (d);
39. (a); 40. (a);

Solutions (41-45):

Three persons are standing between L and F. O is standing immediately ahead of L. P is standing adjacent to F. Only two persons are standing between P and Z who is standing behind F. Only one person stands between Z and G. H is standing exactly behind G.

Case-1	Case-2	Case-3
O	O	O
L	L	L
P		
F	F	F
	P	P
Z		G
		H
G	Z	Z
H		
	G	
	H	

Q is standing at one of the extreme end. Four persons are standing between Q and K. K is standing immediately behind L. Not more than 14 persons are standing in the row. So, from this case-2 gets eliminated.

Case-1	Case-3
Q	Q
O	O
L	L
K	K
P	
F	F
	P
Z	G
	H
G	Z
H	

C is standing immediately behind of T. X is standing behind V but ahead of M. M is not standing behind G. So, from this case-3 gets eliminated. So, the arrangement is—

Case-1
Q
T
C
O
L
K
V
P
F
X
Z
M
G
H

Now for the amount earn by them, the information given is—
S@P means S earn 500 more than P.
S#P means S earn 1000 less than P.
S$P means S earn equal to P.
The amount earn by all of them is given below—
V@Z$H@X$Q$G i.e. V>Z=H>X=Q=G
M$F#G i.e. M=F<G
V#L#T i.e. V<L<T
T$C#O i.e. T=C<O
F@K@P i.e. F>K>P
By combining all we get---
O>C=T>L>V>Z=H>X=Q=G>M=F>K>P

41. (e); From O>C=T>L>V>Z=H>X=Q=G>M=F>K>P, if the amount earn by M is 7000
Then the amount earn by Q, Z and L is 8000, 8500 and 10000 respectively. So, the sum is= 26500

42. (b); Six persons

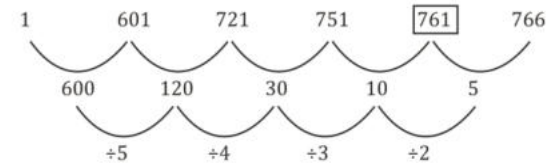
43. (a); Two

44. (b); From O>C=T>L>V>Z=H>X=Q=G>M=F>K>P, if the amount earn by X is 4500
Then the amount earn by O and P is 8500 and 2500 respectively So, the difference is= 6000.

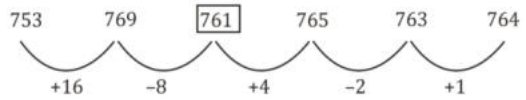
45. (e); The amount earn by T is—
From O>C=T>L>V>Z=H>X=Q=G>M=F>K>P, if the amount earn by K is 5000, then the amount earn by T will be 9500.

QUANTITATIVE APTITUDE

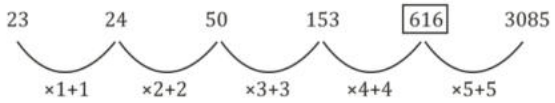
46. (d);



x = 761



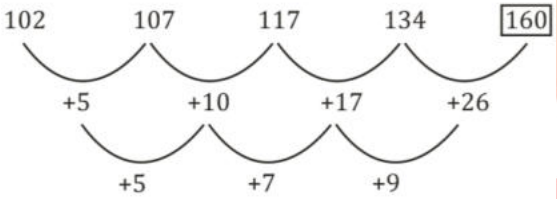
y = 761



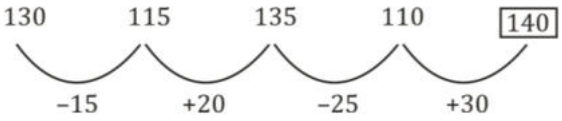
z = 616

∴ x = y > z.

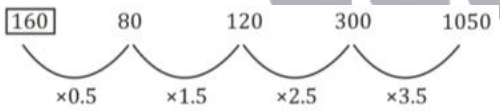
47. (b);



x = 160



y = 140



z = 160

∴ x = z > y

48. (c); Total area of apple pie = X × 0.77 cm^2

ATQ,

(X – 3) × 0.616 × 2 = X × 0.77 ⇒ X = 8

49. (e); Radius of original pie be R cm.

Area of the pie = 8 × 0.77 cm^2

ATQ,

$\pi R^2 = 8 \times 0.77 \Rightarrow R = \frac{7}{5}$ cm.

Required circumference = $2 \times \frac{22}{7} \times \frac{7}{5} = 8.8$ cm

50. (b); Total area of entire pie = 0.77 × $8cm^2$

Required area of each piece = $\frac{0.77 \times 8}{11} = 0.56\ cm^2$

Solutions (51-53):

For project A:

X × 88 = (X + 8) ×66 ⇒ X = 24

For project B:

Y × (Y – 1) = (Y + 6) (Y – 6)

⇒ $Y^2 - Y = Y^2 - 36$

⇒ Y = 36

For project C:

$Z^2 \times 75 = M^2 \times 108$

⇒ Z = 1.2 M

51. (c); Total number of workers in team P

= 0.5 × 1.2M × 2M

= $1.2M^2$

Required days = $\frac{108 \times M^2}{1.2M^2}$ = 90 days.

52. (c); Required days = $\frac{24 \times 88}{64}$ = 33 days.

53. (b); In 10 days, work done = 0.5 × 36 × 10 =180 units

Now, total people = 0.5Y + 0.5Y = 36

Let 36 people work for A days to complete the remaining work.

ATQ,

36 × A + 180 = 36 × 35

⇒ A = 30 days.

Total required days = 40 days

54. (b); male population in village

A = 20 × 300 – 2400 = 3600

Required gender ratio = $\frac{3600}{2400} \times 100 = 150$

55. (d); Let number of female in village A be x.

So, the number of female in village C = x

Total population of village A = 6000.

Total population of village C = 4000

ATQ,

$\frac{(6000-x)}{x} \times 100 = \left(\frac{4000-x}{x} \times 100\right) + 125$

⇒ x = 1600

Number of male in village C = 2400

56. (a); total population of village B in 2001 = 6 × 400 =2400

Total population of village E in 2001 = 9600

Population of E in 2010 = 9600 × 1.5 = 14400

Solutions (57-59):

Let the number of green balls in bag X be 'a'

Then number of red balls in the bag=(30-a)

ATQ

$^{a}C_1 \times {}^{(30-a)}C_1 / {}^{30}C_2 = \frac{40}{87}$

a×(30-a) = 200

a = 10 or 20

If green balls = 10 Then, red balls = 20 According to II statement, Green balls = (10 – B) Red balls = (20+ B) According to III statement. $\frac{^{(10-B)}C_2}{^{30}C_2} = \frac{7}{29}$ $\Rightarrow \frac{(10-B)(9-B)\times 2}{30\times 29\times 2} = \frac{7}{29}$ $\Rightarrow (10-B)(9-B) = 210$ On solving, B = −5,24	If green balls = 20 Then, red balls = 10 According to II statement Green balls = (20 – B) Red balls = (10 + B) According to III statement $\frac{^{(20-B)}C_2}{^{30}C_2} = \frac{7}{29}$ $\Rightarrow$ (20–B) (19–B) = 210 $\Rightarrow$ B= 5, 34 But $0 < B \leq 20$ So, B = 5

But $0 < B \leq 10$
So, in bag Y:
Green balls = 15
Red balls = 15
After statement IV:
Number of green balls in bag Y = (15 - C)
Number of red balls in bag Y = (15 + C- 5) = (10 + C)
ATQ,
$= \frac{^{(10+C)}C_2}{^{25}C_2} = \frac{2}{5} \Rightarrow$ C= 6, -25
But $C \neq -25$
So, C = 6

57. (a); Value of A=10

58. (d); Required probability= $^{20}C_2 / {}^{30}C_2 = \frac{38}{87}$

59. (b); Value of C=6

60. (c); ATQ,
$9600 - \left(X \times \frac{30}{100}\right) = 3600 \Rightarrow$ X = 20000
People who are eligible for loan
$= \frac{20}{100} \times 20000 = 4000$
∴ number of people to whom loan are disbursed
= 4000 – 400 = 3600.

61. (e); ATQ
$X = \frac{9600}{60} \times 100 = 16000$
$Y = \frac{16000}{40} \times 100 = 40000$
And
$X + Y + Z = 20000 \times 3$
$Z = 60000 - 40000 - 16000$
$Z = 4000$
People who are eligible for loan
$= 16000 \times \frac{30}{100} = 4800$
Required percentage = $\frac{4800}{4000} \times 100 = 120\%$

62. (b); total people who are approached for loan
= 9600 + 8400 = 18000
total population of the city
$= \frac{18000}{30} \times 100 = 60000$
Required% = $\frac{18000 \times \frac{10}{100}}{60000} \times 100 = 3\%$

63. (d); Let p men can do the task in (d – 2) days
And q boys can do the task in d days
Ratio of efficiency of man to boy = 3:1
$3p(d-2) = 1 \times q \times d$
Now value of d should be positive to satisfy the equation.
From (i)
Let, p = a
q = 2a
$3a(d-2) = 2a(d)$
d = 6 , it is possible
From (ii)
Let, p = 2x
q = 5x
$3\times 2x(d-2) = 5x(d)$
$6d - 12 = 5d$
d =12, it is possible
From (iii)
Let, p = 2b
q = 3b
$3\times 2b(d-2) = 3b(d)$
$6d - 12 = 3d$
d = 4, it is possible
From (iv)
Let, p = 16e
q = 35e
$3\times 16e(d-2) = 35e(d)$
$48d - 96 = 35d$
13d = 96
d = $\frac{96}{13}$ it is possible

64. (a); Let 'X' liters of mixture taken out from the vessel and 'Y' liters of acid B added
Initial ratio of acid A to acid B in vessel = 5 : 1
$400 - \frac{5}{6}X = 80 - \frac{X}{6} + Y + 250$
210 = 2X + 3Y ---------- (i)
Only option A, B & D are possible options which satisfy the equation (i)

65. (c); Let CP of article = 100x Rs.
So, MP of article = 140x Rs.
From (A)
When profit is 22.5%, then selling price of article = 122.5x Rs.
Discount (d)% = $\frac{140x-122.5x}{140x} \times 100 = 12.5\%$
And, when discount doubled then profit = 140x
$\times \frac{75}{100} - 100x = Rs.5x$
Profit % = $\frac{5x}{100x} \times 100 = 5\%$
So, option (A) possible to fill the both respective fillers
From (B)
When profit is 33%, then selling price of article = 133x Rs.
Discount (d)% = $\frac{140x-133x}{140x} \times 100 = 5\%$

And, when discount doubled then profit
$= 140x \times \frac{90}{100} - 100x = Rs.26x$
Profit % $= \frac{26x}{100x} \times 100 = 26\%$
So, option (B) possible to fill the both respective fillers
From (C)
When profit is 19%, then selling price of article = 119x Rs.
Discount (d)% $= \frac{140x-119x}{140x} \times 100 = 15\%$
And, when discount doubled then profit
$= 140x \times \frac{70}{100} - 100x = Rs.-2x$
So, option (C) can't fill the both respective fillers, because it gave a loss
From (D)
When profit is 26%, then selling price of article = 126x Rs.
Discount (d)% $= \frac{14x}{140} \times 100 = 10\%$
And, when discount doubled then profit
$= 140x \times \frac{80}{100} - 100x = 12x$ Rs.
Profit % $= \frac{12x}{100x} \times 100 = 12\%$
So, option (D) possible to fill the both respective fillers
From (E)
When profit is 23.2%, then selling price of article = 123.2x Rs.
Discount (d)% $= \frac{140x-123.2x}{140x} \times 100 = 12\%$
And, when discount doubled then profit = 140x $\times \frac{76}{100} - 100x = Rs.6.4x$
Profit % $= \frac{6.4x}{100x} \times 100 = 6.4\%$
So, option (E) possible to fill the both respective fillers
So, only option A, B, D & E possible to fill both respective fillers

66. (d); Let the number of spelling mistakes and whole word mistakes be 5x and 3x respectively in long questions.
Let number of correct questions in long section be y
ATQ
Total marks obtained in long section
$= 10y - (5x \times 0.5 + 3x \times 0.75) = 150.5$
For x=2, y will have integral value i.e. y $= 16$ and $y < 18$
So, number of questions corrected by him in short section=32
Total marks obtained by him in short section $= 32 \times 5 = 160$

67. (b); Let number of spelling errors made by A in short question be 4x
Then number of spelling errors in long section = 5x
ATQ
$16 \times 10 - 5x \times 0.5 = 135 \Rightarrow x = 10$
Let number of questions corrected in short section be 'a'
ATQ
$a \times 5 - 40 \times 0.5 = 160 \Rightarrow a = 36$
And as he attempted 38 short questions
Number of questions did wrong by him in short section=2

68. (b); Number of questions answered correctly by B in short section= $\frac{175+43\times0.5+18\times0.75}{5} = 42$
Total questions answered correctly by B $= 42 + 14 = 56$
Spelling errors done by D= 56
Spelling errors done by D in short sections = 32
And spelling errors done by D in long sections=24
Total marks obtained by D $= (15 \times 10 - 24 \times 0.5) + (40 \times 5 - 32 \times 0.5) = 322$

69. (e); From I –
Let X-Y= -2 ($X < Y$)
Let a = 4 and b= 2
Then $(-2)^4 > (-2)^2$ so this condition is also satisfying ($X < Y$)
Hence, we can't determine of $X > Y$
From II –
If we take p = 4 and q = 2 or p = 6 and q = 4 so on
And X=-1 and Y=-2
Then it will be false.
So, Statements **(I)** and **(II)** taken together are not sufficient to answer the question

70. (e); Let total profit of Bharat and Ekta is = Rs. 100x
Let investment of Ekta is Rs. y
Profit share of Bharat and Ekta
$= 6000 \times 11 : 12 \times y = 5500 : y$
Final profit share of Bharat = Rs. 50x
ATQ
$100x \times \frac{20}{100} + 80x \times \frac{5500}{5500+y} = 50x$
$20x + 80x \times \frac{5500}{5500+y} = 50x$
$8 \times 5500 = 3 \times 5500 + 3y$
$y = \frac{5\times5500}{3} \Rightarrow y = Rs.9166.67$

71. (c); ATQ,
On Monday $= \frac{900-750}{750} \times 100 = 20\%$ more
On Tuesday $= \frac{1000-800}{800} \times 100 = 25\%$ more
On Wednesday $= \frac{1000-700}{700} \times 100 = 42\frac{6}{7}\%$ more
On Thursday $= \frac{950-950}{950} \times 100 = 0\%$
On Friday $= \frac{1200-800}{800} \times 100 = 50\%$ more
Required number of instances = 3

72. (e); Cost price of 1234 units of share for individual (on Monday) = 1234 × 600 = Rs.740,400
Required difference in % = $\frac{(1100-950)\times1234}{740400} \times 100$
= 25%

73. (e); ATQ,
Profit/loss earned on Monday
= 600 − 750 = Rs.150 loss
Profit/loss earned on Tuesday
= 700 − 800 =Rs.100 loss
Profit/loss earned on Wednesday
= 1000 − 700 = Rs.300 profit
Profit/loss earned on Thursday
= 800 − 950 =Rs.150 loss
Profit/loss earned on Friday
= 1200 − 800 =Rs.400 profit

74. (c); ATQ,
On Monday = 750 − 600 = $Rs.150$
On Tuesday = 800 − 600 = $Rs.200$
On Wednesday = 700 − 650 = $Rs.50$
On Thursday = 950 − 800 = $Rs.150$
On Friday = 800 − 650 = $Rs.150$
Required day is Wednesday.

75. (c); Number of defective fans found during testing in March = $\frac{5600}{20} = 280$
Total number of defective fans in that month
= $\frac{280}{70} \times 100 = 400$
Required % = $\frac{400}{2400} \times 100 = 16\frac{2}{3}\%$

76. (b); **Option I:** Extra cost
= $1600 \times 2.5 + 150 \times \frac{70}{100} \times 20 + \frac{150\times30}{100} \times 60$
= $Rs\ (4000 + 2100 + 2700) = Rs\ 8800$
Option II: Extra cost
= $1600 \times 4 + 150 \times \frac{90}{100} \times 20 + \frac{150\times10}{100} \times 60$
= Rs 10000
Required difference = 1200

77. (d); Let number of all defective units in January and April be x and y respectively.
ATQ,
$y \times \frac{90}{100} \times 20 - \frac{x\times70}{100} \times 20 = 5300$
$\Rightarrow 18y - 14x = 5300$ ...(i)
And,
$\frac{x\times30}{100} \times 60 - \frac{y\times10}{100} \times 60 = 900$
$\Rightarrow 18x - 6y = 900$ ...(ii)
From (i) & (ii)
X = 200 and y = 450
Required ratio = $\frac{200}{450} = 4:9$

78. (b); Number of defective items sold to the customer
= $\frac{1620}{60} = 27$
Number of all defective units in may
= $\frac{27}{10} \times 100 = 270$
Total manufactured units = $\frac{270\times7}{180} \times 100 = 1050$

79. (d); Let the number of girls be x
Then, numbers of boys = (x + 50)
Let number of girls who joined the college be y
Atq,
$\frac{x+50}{x+y} = \frac{2}{5}$
$\Rightarrow 5x + 250 = 2x + 2y$
$\Rightarrow 3x + 250 = 2y$
$\Rightarrow y = \frac{3x+250}{2} = \frac{3x}{2} + 125$
For y to be minimum, x will be 2
$y = \frac{3\times2}{2} + 125 = 128$

80. (b); Sol
Let gold and copper used in first ornament be $6a$ and $5a$
Let gold and copper used in second ornament be $5b$ and $3b$
$\Rightarrow 6a + 5b = 122$ ...(i)
$5a + 3b = 90$ ...(ii)
Solving equation (i) and (ii) we get
$a = 12$
$b = 10$
Weight of second type ornament
= (5 + 3) × 10 = 80 gm
Number of ornaments = $\frac{80}{8} = 10$

ENGLISH LANGUAGE

81. (c); The first part in the arrangement will be (4) because it is the most appropriate starter of the sentence which is discussing about coal fired power plants. And will be followed by (2) as it completes (4). The next part in the arrangement will be (3) followed by (1) to make a meaningful sentence. Hence the correct arrangement is 4231.

82. (b); The first part in the arrangement will be (2) because it is the only viable starter. Next in the arrangement will be (1) as at the end of (2) article 'an' is used which will be followed by 'investment'. So the second part in the arrangement will be (1) which will be later followed by (4) and (3) to make a meaningful sentence. Hence, the correct option choice would be option (b)

83. (a); First part in the arrangement could be either (4) or (3) but choosing (3) as the starting of the sentence will hinder the sentence structure. So, we will start the sentence with (4). Next in the arrangement will be
(1) because it is explaining the process and procedures, this will be later followed by (2) and (3) to make a meaningful sentence. Hence, the correct answer choice would be option (a)

84. (d); In the given sentence, only option only (3) is the most viable starter of the given sentence. This will be later followed by (1) because it forms a coherent part of the sentence as, 'action points'. Next in the arrangement will be (2) followed by (4). Hence, the correct answer choice would be option (d)

85. (b); The correct sequence of the rearrangement will be DCA. However, sentence (B) fails to make coherent sense with the passage because the remaining sentences are discussing about The White Paper that goes on to enumerate several action points that the government must work on to enhance the transmission sector and sentence (B) is discussing about the process to develop transport system in the country. Hence, the correct answer choice would be option (b)

86. (c); Crunches means crush (a hard or brittle foodstuff) with the teeth, making a loud but muffled grinding sound.
Sanctions mean a threatened penalty for disobeying a law or rule. Impinge means to have an effect on something, often causing problems by limiting it in some way
Distinguish means very successful, authoritative, and commanding great respect.
Hence, the correct combination of word to fill the given blanks would be option (c)

87. (b); Deter means prevent the occurrence of. Ripen means become or make ripe.
Conscious means determined and intentional
Debilitating means (of a disease or condition) making someone very weak and infirm Impacting means a powerful effect that something, especially something new, has on a situation Unsparing means given freely and generously
So, from the given options, only option (b) will fill the given blanks to make the given sentences both grammatically and contextually correct. Hence, the correct choice would be option (b)

88. (e); Drastically means severe and sudden or having very noticeable effects Eloquently means fluency or persuasiveness in speaking or writing.
Unravelling: investigate and solve or explain (something complicated or puzzling) Hauled means propel or pull oneself with difficulty.
So, from the given options, only option (e) will fill the given blanks to make the given sentences both grammatically and contextually correct. Hence, the correct choice would be option (e)

89. (c); Trickier: If a piece of work or problem is tricky, it is difficult to deal with and needs careful attention or skill
Assiduity: constant or close attention to what one is doing Reprobate: a person without morals who is disapproved of
Devious means showing a skilful use of underhand tactics to achieve goals.
So, from the given options, only option (c) will fill the given blanks to make the given sentences both grammatically and contextually correct. Hence, the correct choice would be option (c)

90. (e); Altercate means dispute or argue noisily and publicly.
Duping means to deceive someone, usually by making that person do something that they did not intend to do
Extraordinary means very unusual, special, unexpected, or strange Protract means lasting for a long time or longer than expected or usual.
Perspicuous means clearly expressed and easily understood; lucid
So, from the given options, only option (e) will fill the given blanks to make the given sentences both grammatically and contextually correct. Hence, the correct choice would be option (e)

91. (b); The lines in the paragraph 1st "While President Hassan Rouhani clinched the agreement in 2015 despite opposition from hardliners, his promise was that it would help lift sanctions, providing relief to Iran's economy." make option (b) as the correct answer. Other options are either not mentioned in the passage or not correct as per the context of the passage. Hence, option (b) is the correct answer choice.

92. (b); As per the lines given in the passage "European countries have been working on a mechanism, which is still in the initial stages, that allows Europe to trade with Iran through a barter system avoiding the dollar and circumventing sanctions." the option (b) is correct answer choice.

93. (d); As per the line of which (A) is part options (a) and (b) do not form a grammatically correct sentence. Option (c) also does not fit as per the theme of the sentence. But using option (d) makes a grammatically and contextually correct sentence. Hence, option (d) is the correct answer choice.

94. (b); The lines in the paragraph 3rd "the most basic way to secure our space capabilities is to distribute them across many different satellites and spacecraft, so that business continuity is unaffected even if an adversary manages to disable one or more of our satellites" makes option (b) as the correct answer. Other options are either not mentioned in the passage or not correct as per the context of the passage. Hence, option (b) is the correct answer choice.

95. (d); From the paragraph 4th, one can infer the meaning of the phrase. That is for space technology, ISRO is the only option that India is using now. But India should go for privatising the Space Technology too. Hence, option (d) is the correct answer choice.

96. (c); As per the starting of the passage and the lines given on the beginning of the passage "must ramp up both our capacity to use space and our capacity to deny our adversaries the reliable use of space" the option
(c) is correct answer choice.

97. (c); Only option (c) can be inferred from the given passage. Hence, option (c) is the correct answer choice.

98. (b); The lines in the paragraph 3rd " If the top court had upheld the tribunal's verdict – on the grounds that the law wasn't clear about how sale proceeds would be divided – banks would have had to kiss goodbye to substantial recoveries, step up bad-loan provisions and push more salvageable debtors into liquidation, leading to unnecessary job losses." make option (b) as the correct answer. Other options are either not mentioned in the passage or not correct as per the context of the passage. Hence, option (b) is the correct answer choice.

99. (c); As per the paragraph given in the end of the passage "would have required financial creditors to share the money from any new buyer of a bankrupt business equally with miscellaneous suppliers and other unsecured lenders." the option (c) is correct answer choice.

100. (c); The meaning of the word 'mired' is 'to be involved in a difficult situation, especially for a long period of time'. Thus the meaning of the phrase is "to get stuck or entangled in something." So, the meaning of the phrase can be inferred from the (I) and (II) statements. Hence, option (c) is the correct answer choice.

101. (d); Both options (a) and (c) can be inferred from the given passage. Hence, option (d) is the correct answer choice.

102. (d); To validate the answer, refer to the first paragraph of the passage, which states, "One of the main constraints in trade between Russia and India is the lack of smooth independent banking infrastructure connecting the two countries." Here, the statement given in option (d) clearly justifies the quoted text. Hence, option (d) is the most suitable answer choice.

103. (b); To validate the answer, refer to the second paragraph, which states, "With US dollar payments put on hold in 2018, India and Russia had to urgently look for alternative solutions. Options on the table included coming back to trading in rupees and roubles, in euros, Singaporean dollars, etc. Importantly, this situation attracted the attention of bankers and decision-makers on both sides to the issue of payments." Here, the statement given in option (b) clearly justifies the quoted text. Hence, option (b) is the most suitable answer choice.

104. (d); Refer to the second paragraph of the passage given above, which mentions, "Although India aims to diversify its' defence supplies and localize development and production, Indian officials have iterated consistently that India's relations with Russia in the sphere of defence will remain a priority despite the unprecedented pressure coming from the West." The statement given in option (d) clearly justifies the quoted text. Hence, option (d) is the most suitable answer choice.

105. (b); Pass up: Decline a chance
Queer up: Mess up, ruin
Rattle off: Quote figures rapidly. Clear off: Leave somewhere quickly. Close Up: Join together.

106. (c); Mark out: Draw lines to enclose an area.
Max out: Take something to the limit, reach a limit.
Pack away: Put something where it belongs.
Palm off: Pretend something is better than it is in order to sell it.
Bawled Out: to reprimand loudly or severely

107. (c); Claw Back: an act of retrieving money already paid out, typically by taxation.
Hook Up: Meet someone.
Knuckle Under: Submit to authority
Lash Out: React angrily
Latch on: Understand, often after a long time.

108. (d); Jaw away: Talk just for the point of talking rather than having anything to say.
Keel Over: Surrender, give in.
Jazz Up: Make something more interesting or attractive.
Jerk Around: Behave stupidly.
Jam On: Apply or operate something forcefully.

109. (c); Refer to the fourth last line of the passage given above, which mentions, "Plastics may be less expensive than other inputs in manufacturing, but recycling them into new products extends their life and provides a substitute for virgin material." Here, the quoted text can be clearly inferred from the statement given in option (c). Hence, option (c) is the most suitable answer choice.

110. (d); To validate the answer, refer to the lines mentioned in the paragraph, "There is also a big opportunity here, which the trade, municipal governments and pollution control authorities need to see. The two prongs of the solution are packaging innovation that reduces its use by using alternatives, and increasing the process of separation, collection and dissemination of waste." Here, statements given in options (b) and (c) clearly justify the quoted text. Hence, option (d) is the most suitable answer choice.

111. (b); Here, the passage given above has discussed the huge amount of plastic wastes especially the plastic which is used by corporates for packaging. It further mentions the need to recycle it to prepare fresh material. Hence, option (b) is the most suitable answer choice.

112. (c); To validate the answer, refer to the passage, which states, "It is eight years since the concept of Extended Producer Responsibility (EPR) was incorporated into the Plastic Waste Management Rules, but municipal and pollution control authorities have failed to persuade commercial giants to put in place a system to collect and process the waste." Here, the statement given in option (c) clearly justifies the quoted text. Hence, option
(c) is the most suitable answer choice.

113. (d); To validate the answer, refer to the lines, "For one, the current account deficit widened to 2.4% of gross domestic product in the first quarter of 2018-19 and is expected to reach 3% for the full year. The rupee, which is down about 16% since the beginning of the year, doesn't seem to be showing any signs of recovery either. Further, the growth in the sales of petrol and diesel has already been affected adversely as their prices have shot through the roof. All this will likely weigh negatively on the prospects of the Indian economy, the world's fastest-growing, in the coming quarters." From the quoted text, we can infer all the three given statements. Hence, option (d) is the most suitable answer choice.

114. (c); To validate the answer, refer to the lines, "Notably, speaking at the same event, Saudi Arabian Energy Minister Khalid A. Al-Falih refused to openly commit to lower oil prices, opting instead to say that the price of oil could have been much higher but for the efforts taken by his country to boost supply." Here, the statement given in option (c) clearly justifies the quoted text. Hence, option (c) is the most suitable answer choice.

115. (d); To validate the answer, refer to the first few lines of the passage given above, which mentions, "At a gathering of prominent oil ministers in New Delhi on Monday, Prime Minister Narendra Modi urged oil- producing countries to reduce the cost of energy in order to aid the global economy in its path towards recovery. Mr. Modi also called for a review of payment terms, demanding the partial use of the rupee instead of the U.S. dollar to pay for oil, in order to ease the burden on oil-importing countries in the wake of the strengthening of the dollar." Here, we can infer the quoted text from the statements given in options (a) and (c). Hence, option (d) is the most suitable answer choice.

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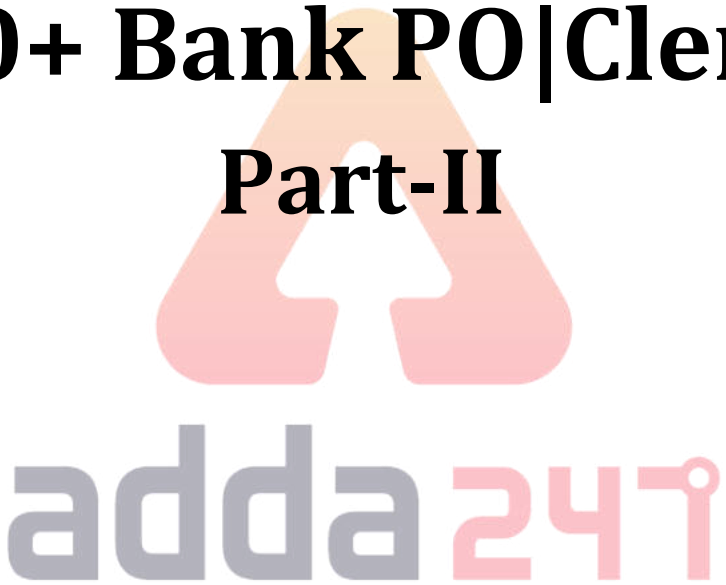


REASONING ABILITY

Directions (1-5): Study the information carefully and answer the questions given below.

Certain number of persons are sitting around a circular table, which has a circumference of 546 cm. All the persons are facing towards the center. They are sitting at distances to each other which are consecutive multiple of six. A is 3rd to the left of I. Two persons are sitting between K and I. M is immediate right to L. H sits to the left of G at a distance of 72 cm. The distance between A and D is 18 cm. The number of persons sitting between J and B is same as between B and F. The distance between E and F is LCM of 6 and 5. Neither M nor L is neighbor of K and H. The number of persons sitting between C and I is same as between I and E. The distance between K and I is not more than 162cm. Either C or E is neighbor of K.

1. Which of the following represents the distance between B and F?
(a) 144 (b) 72 (c) 99
(d) 108 (e) none of these

2. Who among the following are immediate neighbor of J?
(a) K, L (b) G, A (c) H, M
(d) F, D (e) none of these

3. Who among the following sits 4th to the right of the one who is 6th to the left of A?
(a) K (b) G (c) H
(d) D (e) none of these

4. Which of the following represents the distance between H and L?
(a) 144 (b) 180 (c) 345
(d) 108 (e) none of these

5. Four of the following belongs to a group find the one that does not belong to that group?
(a) B, C (b) M, J (c) I, D
(d) K, E (e) L, M

6. **Statement** "Beware! Recycled coloured plastic bags contain harmful colour pigments, which on coming in contact with food particles, make food unfit for consumption, resulting in severe food poison, allergies and in extreme cases even death." –A scientist.
Assumptions
i. Non-biodegradability nature makes plastic bags an environmental hazard.
ii. Use of recycled coloured plastic bags is harmful and has cascading effects on human life
(a) Only (i)
(b) Both (ii) and (ii)
(c) Only (ii)
(d) Either (i) or (ii)
(e) None of these

7. It has been reported in recent years that a very large number of seats in the engineering colleges in the country remain vacant at the end of the admission session.
Which of the following may be the probable cause of the above effect?
(a) There has been a considerable decrease in hiring of engineering graduates due to economic slowdown in the recent years
(b) Students have always preferred to complete graduation in three years time instead of four years for engineering
(c) The Government has recently decided to provide post qualification professional training to all engineering graduates at its own cost
(d) There has always been a very poor success rate among the engineering students
(e) None of the above

8. The condition of the roads in the city has deteriorated considerably during the first two months of monsoon and most of the roads have developed big pot holes.
Which of the following can be a possible effect of the above cause?
(a) The municipal corporation had repaired all the roads in the city before onset of monsoon with good quality material
(b) A large number of people have developed spine related injuries after regularly commuting long distances by road within the city
(c) The municipal corporation has been careful in choosing the contractors for repairing roads in the past
(d) People always complain about potholed roads during the monsoon months
(e) None of the above

Direction (9-13): Study the information carefully and answer the questions given below.

There is 3*5 matrix which can produce signals which in turn help in the illumination of some bulbs. The row of the matrix are denoted by @, % and # from bottom to top and the columns are denoted by the alphabets A, B, C D and E from left to right.
@ row contains number which are consecutive multiple of 7, staring from 28 (from left to right).
% row contains number which are consecutive multiple of 11, starting from 11 (from left to right).
# row contains number which are consecutive multiple of 13, starting from 13 (from left to right).
The matrix helps in producing signals which can be either a single string of number X- or two-line string X and Y.
There are 4 lights P, Q, R and S. Based on the outcome of the strings mentioned above one of the light blinks.

Condition for blink:
1. If the outcome is below 85, then P will blink
2. If outcome range is 85-110, then Q blinks
3. If outcome range is 111-210, then R blinks
4. If outcome is greater than 210, then S blinks

For outcome of the string:
1. If the string has all even numbers, then outcome of the string is obtained by adding all the numbers.
2. If an odd number is followed by an even number then the one's places of all the two-digit numbers are deleted and, tenth place are multiplied to get the outcome
3. If the string contains 2 prime number, then the tenth's place is deleted from each of the two-digit number and remaining number are multiplied.
4. If no above logic is followed, then simple outcome is addition of the numbers.

9. If x =#C %D #A #E, then which bulb blink?
(a) S (b) Q (c) P
(d) R (e) Either R or S

10. If X = @A @C #D %B, then which bulb blink?
(a) S (b) Q (c) P
(d) R (e) Either P or Q

11. If X = #A%E %A @B, then which bulb blink?
(a) S (b) Q (c) P
(d) R (e) Either P or Q

12. If X =@A#B@D%C, then which bulb blink?
(a) S (b) Q (c) P
(d) R (e) Either R or S

13. If X = @E#D@D#E, then which bulb blink?
(a) S (b) Q (c) P
(d) R (e) Either R or S

Direction (14-18): In the following questions, the symbols #, &, @ and $ are used with the following meanings as illustrated below. Study the following information and answer the given questions:
Note: The directions which are given indicates exact directions.
P#Q - P is in the south direction of Q.
P@Q - P is in the north direction of Q.
P&Q - P is in the east direction of Q.
P$Q - P is in the west direction of Q.
P£QS- P is the mid-point of QS vertically.
Note- For southeast direction it used to be written as P#&Q and so on…
When it is given that the Car honks once then it will be considered as the car taken a left turn and if it is given as the car honks twice then it will be considered as the car takes a right turn.
Point S is &15m of point B. Point J is @33m of point S. Point K is @25m of point B. Point L is $20m of point K. Point Q is #40m of point L. Point F is &40m point Q. Point E£DF. Point D is @30m of Point F.

14. What distance the car has to travel from point D to reach the airplane which is parked at point J?
(a) 22m (b) 50 m (c) 43 m
(d) 23m (e) 35m

15. What could the possible shortest route to reach point K from point J?
(a) Started in east till 15km, honks once, cover 8km
(b)Started in west till 15km, honks twice, cover 8km
(c) Started in south till 25km, honks once, cover 8km
(d) Started in north till 5km, honks once, cover 8km
(e) Started in west till 15km, honks once, cover 8km

16. Point D is in which direction from point Q?
(a) # (b) @$ (c) #$
(d) @& (e) #&

17. If Point U is #15m of point B then which of the following is the position of U with respect to F?
(a) @, 24m (b) $, 25 m (c) #, 15 m
(d) $, 20m (e) None of these

18. Point E is in which direction from point B?
(a) # (b) @ (c) $
(d) & (e) #&

Directions (19-23): Study the following information carefully to answer the given questions:

There are six employees A, B, C, D, E, F of a company and all of them are working on six different designation of a company viz. CMD, MD, CEO, COO, SE, JE. All the designations given are to be considered in a given order (as CMD is considered as Senior-most and JE is considered as the Junior-most). Only two persons are senior than A. The one who is junior than only one person likes Litchi. The one

who likes Mango is senior than B. F likes Guava and is junior than B. B does not like Litchi. C is senior to the one who likes Kiwi. The one who likes Kiwi is not JE. The one who is JE neither likes Banana nor Grapes. D does not like Litchi and also is not SE. E does not like Kiwi and is junior than C but senior than F. D is junior than the one who likes Banana. C is not junior than the one who likes Grapes. The one who likes Kiwi is just junior than D. A does not like Banana. The one who likes Grapes is senior than the one who likes Mango.

19. Who among the following is JE of the company?
(a) C (b) A (c) B
(d) D (e) F

20. Who among the following likes Grapes?
(a) E (b) C (c) A
(d) B (e) D

21. How many persons are junior than B?
(a) One (b) Two (c) Three
(d) More than three (e) None of these

22. The one who is CMD like which among the following fruit?
(a) Guava (b) Mango (c) Kiwi
(d) Grapes (e) Banana

23. Who among the following is just junior than A?
(a) E (b) C (c) F
(d) B (e) D

Directions (24-28): Study the following information carefully and answer the questions given below.

Six persons J, L, R, O, X, Z of a family born in six different years 1978, 1982, 1995, 1997, 2013 and 2015. (All the ages of the given persons have been calculated on base year 2018 and all the persons are considered to be born on same date of same month). There is a difference of 18 years between the ages of O and J. O is the father of J. L is younger than R. X is not the oldest person of the family. R is not married to Z. Z was born in an even numbered year. L is the only granddaughter of the mother of O. Father of O is 4 years older than O's mother. J is the son of R.

24. How is L related to X?
(a) grand father
(b) grand mother
(c) grand daughter
(d) grand son
(e) none of these

25. Who among the following born in 1982?
(a) O (b) R (c) X
(d) J (e) L

26. R was born in which of the following year?
(a) 1997 (b) 2015 (c) 2013
(d) 1982 (e) None of these

27. How is R related to Z?
(a) Daughter-in-law
(b) mother
(c) aunt
(d) Daughter
(e) none of these

28. Four of the five are alike in a certain way and hence form a group, which among the following does not belong to the group?
(a) O (b) R (c) X
(d) J (e) L

Directions (29-31): Study the given information carefully and answer the given questions.

Ten persons are sitting in two parallel rows. P, Q, R, S, T are sitting in row-1 facing north while K, L, M, N, O are sitting in row-2 faces south.

I. P sits second to the right of Q. O sits immediate left of M. O does not sit opposite to S and Q.
II. Only one person sit between L and M. L does not sit opposite to R and S. K sits opposite to T.
III. P does not sit opposite to L and O. N sits second to the right of K. R does not sit at extreme left end. Only two persons sit between S and P.

Each of the questions below, consist of a question and three statements numbered I, II and III. You have to decide whether the data provided in the statements are sufficient to answer the question.

(a) If the data in statement I and II together are sufficient to answer the question, while the data in statement III are not required to answer the question.
(b) If the data in statement I and III together are sufficient to answer the question, while the data in statement II are not required to answer the question.
(c) If the data in statement II and III are sufficient to answer the question, while the data in statement I are not required to answer the question.
(d) If the data in all three statements I, II and III together are necessary to answer the question.
(e) If the data in all the statements, I, II and III even together are not sufficient to answer the question.

(Read the three statements and Give answer)

29. Who among the following sit opposite to L?

30. How many persons are sitting between R and S?

31. Who among the following sit at extreme right end of row-2?

32. Disaster management systems can safeguard India's heritage from climate changes. India is a signatory to the 2015 Sendai Framework for Disaster Risk Reduction, which recognizes that the State has the primary role in reducing disaster risk, terrorism related issues and identifies heritage as a priority area.
Which of the following negates the given statement?

(I) The authority's report also has detailed guidelines for museums on the systems that need to be put in place to tackle different kinds of threats.
(II) The first-of-its-kind analysis by the National Disaster Management Authority (NDMA) of the threats shows that India's museums face lists terrorism; climate-related events such as floods, earthquakes and tsunamis; and vandalism.
(III) Climate-related issues such as floods, earthquakes are not a matter of concern for Indian Heritage.

(a) Only (III) (b) Only (II) (c) Only (I)
(d) Both (II) and (III) (e) None of these

Direction (33-37): Study the following information carefully and answer the given questions:
In coded language
"tradition festival iconic" is coded as – '8X 9J 6XJ'
"aesthetic recreate vibe" is coded as – '8E 9VJ 4W'
"creative emerging shine" is coded as – '8NO 5K 8C'

33. What can be the code of 'during autumn'?
(a) 6M 7FN (b) 6M 6FN (c) 6K 6FN
(d) 6K 6EM (e) None of these

34. What can be the code of 'Impulse Response'?
(a) 7NT 7F (b) 8T 7NR (c) 8F 7MT
(d) 7NT 8F (e) None of these

35. What can be the code of 'Vibrant Ocean'?
(a) 5XB 7J (b) 5XB 7K (c) 5XZ 7M
(d) 5YB 7K (e) None of these

36. What can be the code of 'Ideal Journey'?
(a) 5WC 7T (b) 5FB 7T (c) 5WC 7V
(d) 5FB 7V (e) 5WB 7T

37. What can be the code of 'Enough Rise'?
(a) 6NF 4F (b) 6MH 4F (c) 6MF 4D
(d) 6MH 4H (e) None of these

Direction (38-39): In each of the following questions, two statements numbered I and II are given. There may be cause and effect relationship between the two statements. These two statements may be the effect of the same cause or independent causes. These statements may be independent causes without having any relationship. Read both the statements in each question and mark your answer as-
(a) If statements I is the cause and statement II is its effect.
(b) If statements II is the cause and statement I is its effect.
(c) If both the statements I and II are independent causes.
(d) If both the statements I and II are effects of independent causes.
(e) If both the statements I and II are effects of some common cause.

38. **Statement I**-Infosys, among India's largest software services companies, said it plans to hire 10,000 American workers over the next two years.
Statement II-In filling these jobs, Infosys will hire experienced technology professionals and recent graduates from major universities, and local and community colleges, and the talent pools will be created in the future.

39. **Statement I**- Aadhar has become mandatory for filing income tax returns with PAN card.
Statement II-PAN has become more and more susceptible to duplicity and fraud.

40. **Statement**- According to the latest research-"Few people openly admit to holding racist beliefs on the basis of color but many psychologists claim most of us are nonetheless unintentionally racist. We hold, what are called "implicit biases".
One the basis of the information provided in the above statement, which of the following defines the term "implicit bias" most accurately?
(i) A slight automatic preference for white people over black people.
(ii) Preference for white people over black people.
(iii) Discriminating against a particular community on the basis of colour.
(a) Only (i)
(b) Both (ii) and (iii)
(c) Only (ii)
(d) Only (iii)
(e) None of these.

Directions (41-45): Study the information carefully and answer the questions given below.

There are fifteen people live on different floors in the given three building X, Y and Z such that each of the floor of the building is occupied by the given person. **Building X is immediate west of building Y, which is immediate west to building Z. In the** building ground floor is numbered as 1, above it is floor 2 and so on... In the building floor-1 of building Y is immediate east of floor-1 of building X but immediate west of floor-1 of building Z and so on..
Note: A is west to B does not mean A is immediate west to B. Above or below does not mean in the same building.
N lives to the west of L on 3rd floor. M is immediate west to I. K is immediate east to E. A lives on the top floor of the building such that none of the person lives above A in any of the building. The number of floors between J and H is same as between H and I. I lives below J. The one who is either immediate above or immediate below N is immediate left to B. Two persons live between B and M. M lives in the same building as B. B does not live in the same building as J. **Building** Z has more number of floor than **building** Y but less than **building** X. H is not in the same building as L. Two persons live between D and C. F live to the west of G. D lives above O, but in the same building. D does not live on the even number floor.

41. How many persons are living above B in the same building?
(a) Two (b) One (c) Three
(d) Four (e) None

42. Who among the following lives to the immediate east of F?
(a) L (b) J (c)H
(d)B (e) A

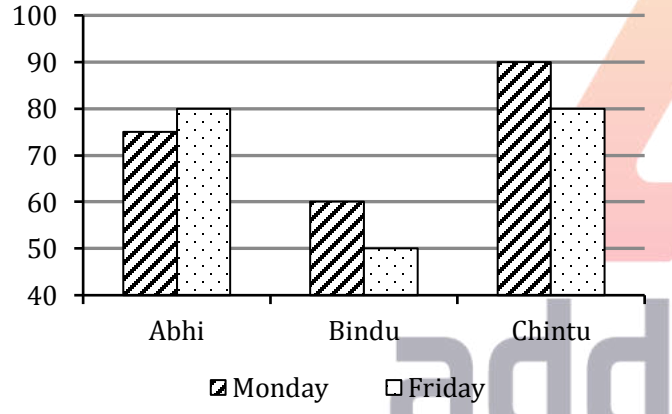
43. Which of the following true regarding O?
(a) Lives in the same building as L
(b) lives on 2nd floor
(c) lives to the west of G
(d) all are true
(e) none is true

44. On which of the following floor does C live?
(a) 3rd (b) 1st (c) 2nd
(d) 4th (e) none of follows

45. Who among the following lives just above N in the same building?
(a) L (b) F (c)H
(d)B (e) A

QUANTITATIVE APTITUDE

Direction (46-50): The given bar graph shows the percentage of query resolved by three people Abhi, Bindu and Chintu on Monday and Friday with respect to total calls received by them.



46. No. of query resolved by Abhi and Chintu on Friday is 360. What could be maximum number of calls that were not resolved by Abhi on Friday?
(a) 89 (b) 40 (c) 12
(d) 100 (e) None of these

47. Number of queries resolved by Bindu on Monday is 180 and call received by him is 25% more than query resolved by Abhi on that day. Find the number of calls received by Abhi on Monday.
(a) 260 (b) 440 (c) 360
(d) 400 (e) 320

48. If 20% calls increased from Monday to Friday for Bindu and Chintu and average number of query resolved by them on Friday is 30 more than that of Monday. Find call received by Chintu on Friday is how much more than that of received on Monday by him.
(a) 125 (b) 220 (c) 120
(d) 200 (e) 250

49. What is the ratio of calls received by Abhi, Bindu and Chintu on Friday. If the number of query resolved by them is in the ratio of 3:4:2.
(a) 12:33:19 (b) 14:32:11 (c) 15:32:10
(d) 10:35:12 (e) 8:7:9

50. Query resolved by Chintu on Monday is 60% of the query resolved by him on Friday. Query resolved by Abhi on Friday is equal to the sum of the query resolved by Chintu on both days. Call received by Abhi on Friday is what % more than that of Chintu on Monday.
(a) 100% (b) 200% (c) 250%
(d) 300% (e) 120%

51. Total number of balls in a bag, which contains Pink and Green ball only, is 16. What is the number of Pink ball?
(A) Probability of drawing a pink ball P(P) < 0.1875
(B) Probability of drawing two green ball P(G) < 1-P(P)
(C) Difference between no. of pink balls and Green balls is 12.

(a) Only statement 'A' alone is sufficient to answer the question
(b) Both statement A and statement C are required to answer the question.
(c) Only statement 'C' alone is sufficient to answer the question
(d) Either statement A or statement C is sufficient to answer
(e) All three together are sufficient to answer the question

52. What is the speed of stream?
(A) Sum of time taken by a boat in upstream and downstream is 27 hours to cover distance 270 km in each.
(B) Speed of boat in downstream is 45 km/h.

(D) Boat cover 90 km in 7 hr, while rowing in upstream

(a) Either A and B or B and C are sufficient to answer the question
(b) Either A and B or A and C are sufficient to answer the question
(c) Either A and C or B and C are sufficient to answer the question
(d) Any two statements are sufficient to answer the question
(e) Either only A or B and C together are sufficient to answer the question

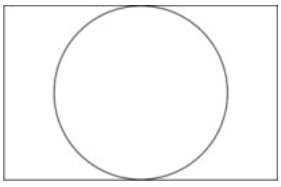
53. Is b < a?

(a) $b = \frac{1}{a^{-5}}$
(b) a < 0
(c) |b| > |a|

(a) Either A and B or B and C are sufficient to answer the question
(b) Either A and B or A and C are sufficient to answer the question
(c) Either A and C or B and C are sufficient to answer the question
(d) Any two statements are sufficient to answer the question
(e) Only A and B are sufficient to answer the question

54. Quantity I: Unit digit of the number $[(1333)^{27}]^{55}$.
Quantity II: Unit digit of the number $[(127)^{43}]^{52}$.
(a) Quantity I > Quantity II
(b) Quantity I < Quantity II
(c) Quantity I ≥ Quantity II
(d) Quantity I ≤ Quantity II
(e) Quantity I = Quantity II or No relation

55. Quantity I: Area of circle, given in figure, is half of the area of rectangle. Value of percent by which length of rectangle is more than breadth.



Quantity 2: A pair of opposite sides of a square when increase by 10cm, then area of figure increased by 400 cm^2. Value of percent by which area increased.
(a) Quantity I > Quantity II
(b) Quantity I < Quantity II
(c) Quantity I ≥ Quantity II
(d) Quantity I ≤ Quantity II
(e) Quantity I = Quantity II or No relation

56. If P, Q and R are natural number, then value of PQ = R + Q =?

(a) P+R=8+Q
(b) $Q^2 = \frac{R^2}{P+1}$
(c) Q = P+2

(a) Either A and B or B and C are sufficient to answer the question
(b) Either A and B or A and C are sufficient to answer the question
(c) Either A and C or B and C are sufficient to answer the question
(d) Any two statements are sufficient to answer the question
(e) Either only A or B and C together are sufficient to answer the question

57. What is the profit percent earned on selling 2 books and 1 pen?

A. Cost price of 3 books is equal to selling price of 4 pens. Profit earned on selling 2 pens is equal to the profit earned on selling one book. Profit earned on selling 4 pens is 50% of their cost price.
B. Profit earned on selling 2 books and 6 pens is 50% which is equal to 500% of the cost price of one pen.
C. Profit earned on selling one book is 100% of the cost price of the one pen.

(a) Either A or B and C are sufficient to answer the question
(b) Either A and B or A and C are sufficient to answer the question
(c) Either A and C or B and C are sufficient to answer the question
(d) A, B and C together are sufficient to answer the question
(e) Only statement A is sufficient to answer.

Direction (58-62): Certain number of people work in retail, online and door to door stores. There are only three type stores and each people works in one or more store. 72% of people were in retail store and people working in only door to door store was $\frac{1}{36}$th of people working in retail store. Number of people working in both door to door store and online store but not in retail store are 55. People working in only online store are 65 more than the people working in only door to door store. Number of people working in only retail store is $\frac{160}{3}$% more than number of people working in online store.

58. What is the number of people who works in retail store, but not only in retail store?

(a) 225 (b) 245 (c) 115
(d) 105 (e) 75

59. What is the total number of people working in all stores?
(a) 360 (b) 300 (c) 250
(d) 400 (e) 500

60. What is the number of people working in online store only?
(a) 65 (b) 55 (c) 75
(d) 80 (e) 15

61. If number of people working in retail and online but not in door to door are 105 then what % of people are there, who work both in retail and door to door stores?
(a) 28% (b) 14% (c) 35%
(d) 49% (e) 56%

62. Number of people working in retail or online store is what percent of people working in only online or only in retail?
(a) $205\frac{15}{17}\%$ (b) $246\frac{17}{19}\%$ (c) $229\frac{09}{13}\%$
(d) $257\frac{17}{19}\%$ (e) $217\frac{13}{17}\%$

Direction (63-66): Given bar shows the % range of commission earned on all sold articles and commission earned by five stores in Rupees.

Stores	Range of commission (%)	Commission earned Ruppes
A	0-16	32000
B	16-32	—
C	—	35000
D	—	—
E	0-20	40000

Note:- Commission percent is on selling price.
Note:- Some values are missing, you have to calculate them according to question.
Note:- Range of commission are in integral values.

63. Store 'A' sells 480 articles of only 3 types of articles it have, their number are in ratio 1 : 2 : 3 and their selling prices are 800, 600 and 400 respectively and commission charged on them have difference of 1 percent in sequence (least number of articles sold have least commission percent) respectively, then find the highest commission% of articles.
(a) 11.375% (b) 12.375% (c) 13.375%
(d) 15.375% (e) None of these

64. Store C sells 3 products in equal numbers (105) and equal commission percent. If there selling price (in Rs.) are 200, 300 and 400. Then what is the commission percent.
(a) $\frac{1200}{27}\%$ (b) $\frac{900}{27}\%$ (c) $\frac{1150}{27}\%$
(d) $\frac{1000}{27}\%$ (e) $\frac{1040}{27}\%$

65. Store D sold 3 articles each in number 100 and each have S.P. of Rs. 800 and commission % for each is in A.P. with common difference of 5. If total commission earned by store D is $14\frac{2}{7}\%$ more than that of store C. Find the minimum range of commission %?
(a) (11 – 22) (b) (16- 23) (c) (05- 08)
(d) (14 – 24) (e) (07 – 10)

66. If store C have only one type article and number of article and its S.P is equal which is (≥ 100 & < 110) then find the % range of commission?
(a) (275 – 300) (b) (340 – 377) (c) (174 – 268)
(d) (294 – 350) (e) (280 – 366)

Direction (67-69): Population of two villages X and Z are 16,000 and 12,800 respectively. Ratio of population of village X to that of Y is 4 : 5. Three manufacturers, A, B and C supply cycles in these three villages. These manufactures manufactured cycles in the ratio of 22: 19 : 20 (A : B : C) by assuming that each person will buy one cycle and 60%, 75% and 80% of the cycles manufactured by A, B and C respectively are sold and selling price of each cycle is Rs. 8,000.

(i) Supply = $\frac{\text{Revenue}}{\text{Selling price of a cycle}}$

(ii) Demand %
$= \frac{\text{Number of cycles ordered by customers}}{\text{Toal number of cycles remainded with manufacturer}} \times 100$

(iii) Revenue = 8000 × number of cycles supplied

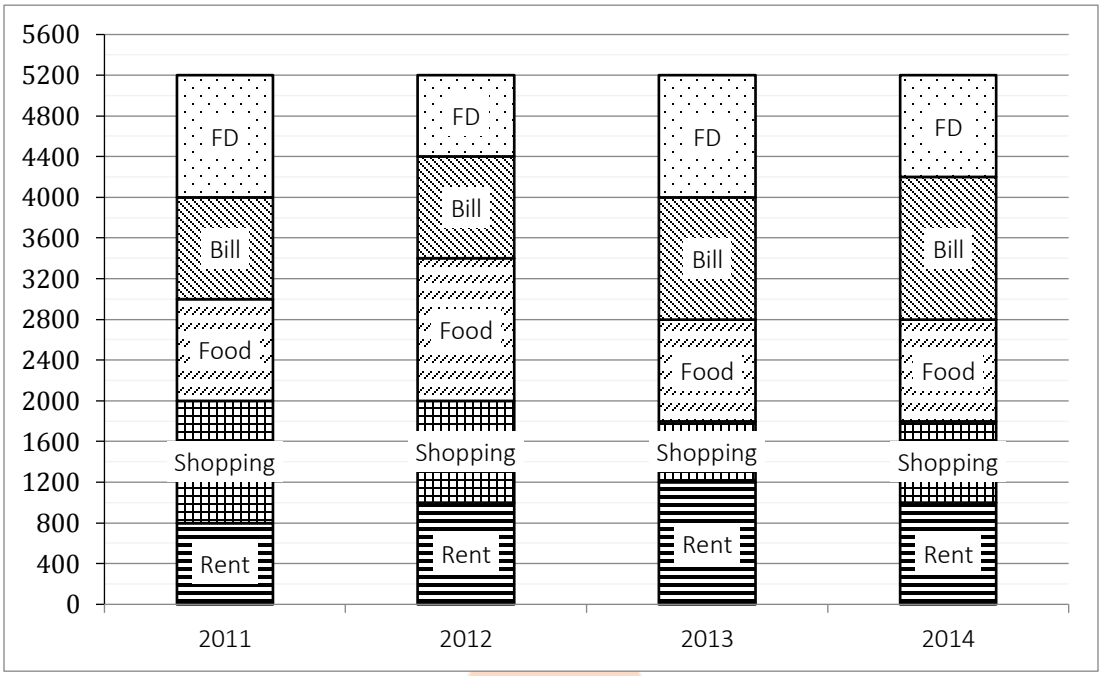
Use the above information to answer the following questions.

67. What is the revenue generated from village Y, if each person of village X and Z purchased a cycle?
(a) 8.424 crore (b) 4.768 crore (c) 6.348 crore
(d) 9.00 crore (e) 10.246 crore

68. What is the profit earned by manufacture C from village X, if total revenue earned by all three manufacturers in village X is 9.6 crore and number of cycles supply by all of them are equal and cost price of each cycle is 6000?
(a) 90 lakh (b) 50 lakh (c) 75 lakh
(d) 80 lakh (e) 43 lakh

69. On a particular day, there was a demand of 50% for manufacturer A and 10 % for manufacturer C from an another village M which they delivered on the same day. Find that total revenue earned by these two manufacturer together is approximately what percent of their manufacturing cost? Given that manufacturing cost of a cycle is Rs. 6000.
(a) 95% (b) 90% (c) 107%
(d) 120% (e) 113%

Direction (70-74)- Study the given bar-graph carefully and answer the following question.
Bar graph given below shows the expenditure of Rahul in four different years.



70. If bill paid by Rahul in year 2015 is 25% more than the average bill paid by him in year 2013 and 2014 and amount paid by him in FD in 2015 is twice the amount paid by him in FD in year 2011. Then find difference in amount of bill and FD paid by Rahul in year 2015 ?
(a) Rs. 775 (b) Rs. 725 (c) None of these
(d) Rs. 875 (e) Rs. 920

71. Total amount paid by Rahul on Food in year 2011 and 2012 together is what percent more or less than total amount paid by him on shopping in same year together ?
(a) $14\frac{2}{7}\%$ (b) None of these (c) $11\frac{1}{9}\%$
(d) $9\frac{1}{11}\%$ (e) 12 ½%

72. If amount paid by Rahul in year 2010 on Rent is one-fifth of rent paid by him in all years. Then find ratio of rent paid by him in 2010 to amount paid by him on shopping in 2012 ?
(a) 2 : 3 (b) 4 : 5 (c) 3 : 5
(d) 2 : 5 (e) None of these

73. If ratio of amount paid on bills in year 2015 to that of in year 2013 is 3 : 2 and ratio of amount paid by him on food, bills and rent in year 2015 is 1 : 2 : 4. Then find difference in amount paid by him on rent and food in year 2015 ?
(a) None of these (b) Rs 1200 (c) Rs 900
(d) Rs 1800 (e) Rs 2700

74. Average of amount paid by Rahul in FD, rent and food in year 2012 is what percent of average of amount paid by him on Shopping, Rent and Bill in year 2013 ?
(a) 123 ⅔% (b) 106 ⅔% (c) None of these
(d) 112 ⅓% (e) 108%

75. 8 men and 4 women together can complete a piece of work in 6 days. Work done by a man in one day is double the work done by a woman in one day. 8 men and 4 women started working and after 2 days, 4 men left and 4 new women joined the work.
Quantity I: More days required to complete the work
Quantity II: 5 days
(a) Quantity I = Quantity II or No relation
(b) Quantity I ≥ Quantity II
(c) Quantity I < Quantity II
(d) Quantity I ≤ Quantity II
(e) Quantity I > Quantity II

76. X started from a point A towards point B. After 2 hours. Y started from B towards A. By the time X travelled one-fifth of the total distance, Y had also travelled the same. Y's speed is thrice of that of X's speed.
Quantity I: Difference in time (in hours) taken by X and Y to reach their respective destinations.
Quantity II: 12 hours
(a) Quantity I = Quantity II or No relation
(b) Quantity I ≤ Quantity II
(c) Quantity I ≥ Quantity II
(d) Quantity I < Quantity II
(e) Quantity I > Quantity II

77. A vessel contains 2.5 litres of water and 10 litres of milk. 20% of the contents of the vessel are removed. To the remaining contents, x litres of water is added to reverse the ratio of water and milk. Then y litres of milk is added again to reverse the ratio of water and milk.

Quantity I: Value of 'y'
Quantity II: Value of 'x'
(a) Quantity I = Quantity II or No relation
(b) Quantity I ≤ Quantity II
(c) Quantity I ≥ Quantity II
(d) Quantity I < Quantity II
(e) Quantity I > Quantity II

Direction (78-80): Study the given passage carefully and answer the questions.

Rahul, Sandy and Sati invested in ratio 2 : 3 : 4. After 4 months Sandy added Rs. 1500 more in his investment and Rahul withdrew Rs. 800 from his investment. After six months more Sati added to his investment an amount equal to half of the investment done by Rahul in first four months and Sandy invested 50% more than the investment done by Sati in first 10 months whereas Rahul added to his investment an amount that is equal to investment done by Sandy in first four months. Ratio of profit of Sati to total profit at the end of year is given as 125 : 376.

78. Profit of Sandy is approximately what percent of total profit?
(a) 64% (b) 48% (c) 72%
(d) 68% (e) 42%

79. What is the difference between profit share of Rahul and Sandy if total profit is Rs.37,600?
(a) 12,000 (b) 16,400 (c) 18,500
(d) 22,900 (e) 20,000

80. Veer have 250% more than initial investment of Sati for a year. Find total interest earned by him if he invested his amount in a scheme which offers 20% p.a. compound interest for 2 years?
(a) Rs. 140 (b) Rs. 1500 (c) Rs. 1540
(d) Rs.1600 (e) Rs.1640

ENGLISH LANGUAGE

Directions (81-88): Read the following passage carefully and answer the questions given below it. Certain parts are given in bold to answer some of the questions based on the passage.

We all are aware of the fact that nothing is permanent in this world, neither products nor technology. As day by day, improvements and updations are made in technology, leading to new inventions and innovations in every sphere of life. Invention refers to the creation of a brand new product or device. Conversely, innovation is an act of making changes to the existing product or the process by introducing new ways or ideas. At first sight, the two terms sound alike, but if you dig deeper, you will find that there is a fine line of difference between invention and innovation that lies in their connotations. While invention is all about creating or designing something, innovation is the process of turning a creative idea into reality. **[A] There is often a fine line between genius and insanity.** Innovation is not only important on the individual level, but can make or break a business as well.

Innovative businesses create dynamic products, adjust existing services, and/or implement new ideas. **[B] They are not afraid to color outside the lines and try something new, even if it is risky.** If a business is not innovative, they risk losing work to competitors. Lack of innovation also has indirect results such as losing staff and decreasing engagement. Therefore, innovation cannot be an afterthought, but rather a crucial element that is included in part of your strategy. It should be a cultural outlook that impacts thinking and improves problem solving. Many successful companies attribute their success to their innovative practices. That said, inventing and innovation are not one in the same. Invention focuses on creating new items or new ways to produce existing items. Very often, invention is a result of innovation, but it is not a requirement. Although invention can be beneficial to a business, the level of importance and necessity can vary according to the industry.

[C] The era of invention is not over, but they have definitely been pushed aside for an era of innovation. While many people are still out there trying to come up with the next "big invention" that is going to improve humanity, businesses have discovered that innovation seems to not only trump invention in furthering a company's brand and profitability, but it can be far cheaper when all the framework is already completed. This can be seen from many major businesses that choose to innovate rather than invent, such as Apple and Sony. First, we must distinguish the difference between invention and innovation. Invention is the creation of a product or introduction of a new process, for example the Alternating Current induction motor is an invention created in 1888. An innovation occurs when someone improves on or makes a significant contribution to an item or process that has already been invented; the Apple iPhone is an innovation of the cell phone. It seems that great inventors are smaller in number – perhaps business models are leaning towards enabling innovation.

Sony's influence in the technology market started with the invention of the first tape recorder, and through years of creativity and perseverance, became innovators of a variety of categories, from computing and electronics to entertainment. Sony shows corporations that for a business to thrive in today's market, a company cannot stay stagnant with on particular item – innovations are essential.

Innovation drives economic growth. Five combination patterns are what create innovation. These are,

the production of a new good, a new method of production, a new market, acquiring a new source of raw minerals and the emergence of a new organization. **[D] A company does not need to invent to have a competitive edge in the market, but need to innovate and create a product that is based on the needs and desires of the consumer.**

81. With what example has the author described 'innovation' as a change that can even prove to be economically lucrative?
(a) Since innovation is coming up with a fresh idea, it leads to research and development department of the organization.
(b) Innovation is a result of invention and hence is economically feasible too.
(c) It focuses on creating new items or new ways to produce existing items.
(d) Innovation can make or break a business as well.
(e) Innovation results in boosting up of economy as an idea for a product or process that has never been made before is highlighted.

82. How is innovation a crucial element that its absence impacts business strategy?
(a) As the companies are destined to fail in its absence because of the stagnant growth.
(b) Competitors could avail benefits over not so innovative businesses.
(c) The lack of innovation has secondary impacts such as losing staff and decreasing engagement.
(d) Both (a) and (b)
(e) Both (b) and (c)

83. Which of the following statement/s infers that an era of invention has not been dissipated but instead pushed aside by that of innovation?
(a) Innovation outclasses invention in enhancing a company's brand's name and profit.
(b) Innovation is far cheaper than invention when all the framework is completed.
(c) As business models are leading towards enabling new inventions which require scientific skills.
(d) Both (a) and (b)
(e) Both (b) and (c)

84. "Sony chose to innovate rather than invent". How has this helped its business to grow?
(a) Sony made a significant contribution to the item by inventing products according to the needs of the consumer.
(b) Sony needs to invent to have a competitive edge in the market.
(c) Innovation helped Sony against staying stagnant with one item.
(d) Business models like Sony are leaning towards enabling invention which has helped businesses to grow.
(e) All of these.

85. What can be illustrated from statement [A] "**There is often a fine line between genius and insanity**."
(a) One should be careful while innovating as a successful innovation can build a business while a failure can destabilize the business.
(b) Genius and insane innovations cannot be separated through a thin line of difference.
(c) Genius innovations can turn into insane outcomes if they fall within the line.
(d) Insane innovations provide a line to develop genius innovations.
(e) None of these

86. What can be inferred from statement [B] **"They are not afraid to color outside the lines and try something new, even if it is risky"?**
(a) Businessmen innovates every colorful product even though it is risky for their enterprise.
(b) Businessmen do not analysis the pros and cons while developing the new innovation.
(c) Businessmen are ready to think or act in a way that does not conform to set rules even though it is quite risky for the business.
(d) Businessmen set their minds to break the rules required to introduce a new innovation.
(e) None of these

87. Statement [C] **"The era of invention is not over, but they have definitely been pushed aside for an era of innovation"** in the passage may not be grammatically or contextually correct. Choose the most suitable alternative that will replace the statement to adhere to the grammatical syntax of the paragraph.
(a) The era of invention is not over, but it has definitely been pushed aside to an era of innovation.
(b) The era of invention is not over, but it has definitely been pushed aside for an era of innovation.
(c) The eras of invention is not over, but they have definitely been pushed aside for an eras of innovation.
(d) The era of invention is not over, but they had definitely been pushed aside for an era of innovation.
(e) None of these

88. According to the author, in reference with the statement [D] "**A company does not need to invent to have a competitive edge in the market, but need to innovate and create a product that is based on the needs and desires of the consumer",** what should be the criteria for innovation?
(a) Profits
(b) Market trends
(c) Competition
(d) Customer satisfaction
(e) None of these

Directions (89-95): Read the following passage carefully and answer the questions given below it. Certain words are given in bold to help you locate them while answering some of the questions.

Compounding the **woes** for the solar power industry, Maharashtra's appellate authority for advance ruling (AAAR) has held that solar power projects are liable to 18% goods and services tax (GST) and not at the lower rate of 5% as claimed by power producers. With the appellate authority reinforcing similar rulings by some other state level authority for advance ruling including of Rajasthan and Maharashtra, this issue seems to be headed for a **prolonged** legal battle unless the government decides to step in and issue clarifications on the taxability of solar power projects. **[A] A rise in project cost could get reflected in the power tariffs that solar power developers offer in auctions to win projects**. With electricity out of the goods and services tax (GST), the higher tax rate becomes an outright cost for the producers thus inflating the final price of the solar power. A government proposal to levy safeguard duty on imported solar panels that is meant to support domestic panel manufacturers is another factor that has brought some uncertainty to solar power project developers.

Solar power generation panels, which constitute around 60-70% of the cost of the solar power projects, are taxed at 5% GST. However, the AAARs have held that setting up of solar projects are covered under the classification of works contract as they consist of supply of goods and services packaged into an immovable property. They held that because of this, these projects are **liable** to be taxed at 18% that applies to works contracts. In the pre-GST era, only a small part of the total project cost, nearly a tenth of it, was covered by a service tax of 15%.The net tax effect on the solar power industry in a pre-GST regime was less than 5%, a reflection of the tax breaks it enjoyed across excise and value added tax.

The higher tax rates being levied on solar power projects is despite the NDA government's focused approach to promote solar power. The industry has sought government intervention to lower the tax burden on such projects.

[B] The solar industry may be about to face what imported coal-based power projects saw some years back --- an increase in production cost due to changes in law and the imposition of new tariffs. Due to a safeguards duty recently announced by the government, close to 7,000 MW of under-construction and recently bid solar projects will see their cost go up and would have to revise their tariff accordingly. Over the years, coal power projects have seen massive fluctuations in price and availability of coal. This led to high litigation cost and increase in the power rate, landing several projects in debt trap**.** Industry executives fear that the same could happen in the solar sector if there is no stability on tariff and clarity on regulations. "A general consensus among various GST advance ruling authorities of 18% rate of GST on solar power projects is quite an aspect of worry for the solar industry players who believe that a 5% tax should be applicable," said Abhishek Jain, tax partner, EY." To end **apprehensions**, the government should consider issuing an explicit clarification on the rate of tax applicable to such projects," he said. India is pursuing a goal of having 100 giga watt (GW) of solar power capacity by 2022, up from 23 GW at present.

India has a renewable power generation capacity of over 70 GW currently, half of which comes from wind power. Intense competition in recent years have drove down solar power tariff discovered in project auctions. The factors that helped producers to bid projects aggressively include lower price of imported solar panels and efficient financial structuring of projects. Industry observers said that global developments like China limiting solar capacity addition making more panels available for imports are helping to counter-balance cost pressures building up in the country. "The solar industry is facing upward cost pressure locally from taxes and financing, but that is getting balanced by lower equipment costs due to global developments. So, for now, project profitability is secure," said Kameswara Rao, Partner, Grid, PwC India.

89. Why does the solar power project issue seems to be heading for a prolonged legal battle?
(a) Because intense competition in recent years have drove down solar power tariff.
(b) As India is pursuing a goal of having 100 giga watt (GW) of solar power capacity by 2022 and it is not getting enough support to do so.
(c) As AAAR's has held that solar power projects are liable to 18% goods and services tax (GST) and not at the lower rate of 5%.
(d) Since the government has issued explicit clarifications on the rate of tax applicable to solar projects.
(e) All of these.

90. What is the factor among the given options that has brought uncertainty to solar power project developers?
(a) Lower equipment costs due to global developments.
(b) Unsecure project profitability of solar power projects.
(c) Lowering down of solar power capacity from 23 GW.
(d) Government's proposal to levy safeguard duty on imported solar panels.
(e) High litigation cost.

91. How have AAAR's justified the liability of solar power projects withstanding under 18 % GST?
(a) As under the previous regime, there were issues in tax treatment of works contract.
(b) As an abatement has been prescribed for works contract under the GST law.
(c) Setting up of solar projects are covered under the classification of works contract as they consist of supply of goods and services packaged into an immovable property.
(d) Both (b) and (c)
(e) Both (a) and (b)

92. What was the consequence of massive fluctuations in price and availability of coal?
(a) As coal is not easier to transport than oil or natural gas, the mining industry got impacted.
(b) Cost of extracting coal decreased.
(c) Decreased economic activity and demand for steel.
(d) High litigation cost and increase in the power rate.
(e) None of these.

93. What are the factors highlighted that helped solar power producers in aggressive bidding?
(a) Lower cost pressure from taxes and financing.
(b) Lower price of imported solar panels and efficient financial structuring of projects.
(c) Safeguards duty embedded in the imported solar panels helped solar power project developers.
(d) Dis-balance in equipment costs due to global developments.
(e) 5% tax reflection effect that it enjoyed across excise and value added tax.

94. Statement [A] "**A rise in project cost could get reflected in the power tariffs that solar power developers offer in auctions to win projects"** in the passage may not be grammatically or contextually correct. Choose the most suitable alternative that will replace the statement to adhere to the grammatical syntax of the paragraph.
(a) A rise for project cost could get reflected in the power tariffs that solar power developers offer in auctions to win projects.
(b) A rise with the project cost could get reflected in the power tariffs that solar power developers offer in auctions to win projects.
(c) A rise with the project cost could reflects in the power tariffs that solar power developers offer in auctions to win projects.
(d) A rise for the project cost could get reflected on the power tariffs that solar power developers offer in auctions for winning projects.
(e) None of these

95. Which of the following options is strengthening the statement [B] "**The solar industry may be about to face what imported coal-based power projects saw some years back --- an increase in the production cost due to changes in law and the imposition of new tariffs."** of the passage?
(a) The tariff and litigation cost are highly instable in solar industry.
(b) High litigation cost and increase in the power rate, landed several coal power projects in debt trap.
(c) Electricity cost is not covered under GST, therefore the project costs increases.
(d) India is pursuing a goal of having 100 giga watt of solar power capacity.
(e) None of these

Direction (96-100): In the following questions, a paragraph is divided into five parts with one of the parts been omitted. You must choose the most suitable alternative among the five that should fill the omitted part making the paragraph grammatically correct and contextually meaningful. If none of the given alternatives are appropriate to fill the blank, choose option (e) i.e. "none of these" as your answer choice.

96. The new possibility would be thwarted by the Supreme Court directive (A)/ to make new car and two-wheeler owners purchase insurance covers (B)/ _____, (C)/ and the insurance regulator's fiat to general insurers (D)/ to sell long-term third-party motor insurance covers for new cars and two-wheelers from September 1. (E)
(a) to set prices just as they do on own-damage covers
(b) accident-proneness of routine travel regions, distance driven per month and so on
(c) to acquire the capacity to enforce the law and the stipulated penalty for its violation
(d) for at least three years and five years respectively, against the existing norm of one year,
(e) None of these

97. Recently, the National Human Rights Commission (NHRC) conducted the first-ever nationwide survey (A)/ of the transgender community in India and found that (B)/ _____. (C)/ It is profoundly absurd that we think of ourselves as inhabiting a "modern" world, (D)/ and yet there exists a sizeable community of people who are structurally ostracized and denied the fundamental right to a livelihood. (E)
(a) as someone who is not of an established and accepted gender.
(b) 92% of the people belonging to the community are subjected to economic exclusion.
(c) it defined a transgender person: as neither a man nor a woman.
(d) what counts as discrimination against a transgender person.
(e) None of these

98. A backlog of 0.24 million unfilled posts in the public sector, (A)/_____ (B)/ surrounding the National Democratic Alliance government's claim on job creation. (C)/ With the public sector being the major contributor in formal sector employment in the country, (D)/ historically, this backlog of vacancies speaks volumes about the nature of the jobs that the government claims to have created. (E)
(a) as reported by the media recently, has escalated the contention
(b) seems to be in denial that this contemporary trend of informalisation
(c) with presumably higher level of education and skill, is perplexing
(d) finds it difficult to match up to the central government pay-packages
(e) None of these

99. _____(A)/ as their currencies resume their prolonged slide against the U.S. dollar. (B)/ The Indian rupee weakened past the 71 mark for the first time ever on Friday, (C)/ registering a loss of about 10% of its value against the dollar since the beginning of the year. (D)/ This makes the rupee the worst-performing currency in Asia. (E)
(a) Investors who earlier put their money in emerging markets
(b) Emerging market currencies, most notably the Turkish lira have suffered much larger losses owing
(c) Emerging market economies continue to be in the spotlight for the wrong reasons
(d) Emerging market countries, which earlier benefited from the easing of monetary conditions,
(e) None of these

100. Kerala's unique topography of coastal plains (A)/ and rolling hills between the Arabian Sea and the Western Ghats (B)/ _____, (C)/ landslides, flooding and coastal erosion being the most common. (D)/ Incidents of flooding have become frequent, aided by human intervention. (E)
(a) 70% of its coastal areas are prone to tsunamis and cyclones
(b) is vulnerable to several natural hazards
(c) 60% of its landmass vulnerable to earthquakes
(d) 12% of its land to floods
(e) None of these

Direction (101-103): Select the phrase/connector (STARTERS) from the given three options which can be used to form a single sentence from the two sentences given below, implying the same meaning as expressed in the statement sentences.

101. (I) Unmanned or remotely piloted aircraft, commonly known as drones, hold immense promise for various commercial applications,
(II) The government has done well to set up a regulatory framework for drone operations, including commercial use.
(i) Given how unmanned…
(ii) Since unmanned or…
(iii) Provided that unmanned…
(a) Only (ii)
(b) Only (iii)
(c) Both (ii) and (iii)
(d) Both (i) and (ii)
(e) All of these

102. (I) People have to be convinced to buy insurance for the expected life of the vehicle at the time of purchase, as in the case of road tax.
(II) This process of convincing interferes with the need to set premium based on data relating to safety and diligence of the driver, which would change over time.
(i) Convincing people to buy…
(ii) People are convinced to buy…
(iii) The convincing process interferes…
(a) Only (i)
(b) Only (iii)
(c) Both (ii) and (iii)
(d) Both (i) and (ii)
(e) All of these

103. (I) The country should find viable and sustainable replacements for its energy needs.
(II) International oil price movements will continue to be an important fault line in India's political economy without sustainable replacements for energy needs.

(i) Unless the country finds…
(ii) Except that the country finds…
(iii) Considering the country finds…
(a) Only (i)
(b) Only (iii)
(c) Both (ii) and (iii)
(d) Both (i) and (ii)
(e) All of these

Directions (104-107): In the following questions, a paragraph is given with three blanks, followed by six words. You have to choose the most suitable combination of words among the five four alternative options, that will fill the blank coherently, forming a grammatically correct and contextually meaningful paragraph. If none of the given combination is appropriate to fill the blank, mark option (e) i.e. "none of these" as your answer choice.

104. The term 'secularism' has meaning only if it assures the expression of any form of difference. This _____, both religious and regional, should not get _____ under the louder voice of the majority, the Commission said. At the same time, it said, discriminatory practices within a religion should not hide behind the cloak of that faith to gain _____.

(i) Subsumed (ii) Socialism (iii) Invigorated
(iv) Diversity (v) Legitimacy (vi) Astuteness
(a) ii, iii, vi (b) iv, i, v (c) v, i, ii
(d) ii, iv, v (e) None of these

105. The Directorate General of Civil Aviation (DGCA) has made public its inquiry report into an incident involving a plane _____ Congress president Rahul Gandhi from Delhi to Karnataka in April. The _____ has revealed that there was a technical _____ in the plane, and as the response of the two pilots to the situation was delayed, the aircraft tilted sharply on one side and began to fall rapidly.

(i) Gremlin (ii) Ferrying (iii) Advocacy
(iv) Glitch (v) Barging (vi) Probe
(a) ii, iii, I (b) iv, i, v (c) v, i, ii
(d) ii, vi, iv (e) None of these

106. The government seems to be in denial that this _____ trend of informalisation of labour in India is policy-induced. By _____ the traditionally used National Sample Survey Office's (NSSO) employment–unemployment estimates, with the Employees' Provident Fund Organisation (EPFO) database of inconsistent quality, the government is trying to sweep some _____ evidences under the carpet.

(i) Disconcerting
(ii) Posterior
(iii) Superseding
(iv) Contemporary
(v) Bewildering
(vi) Supplanting
(a) ii, iii, I (b) iv, i, v (c) iv, vi, i
(d) ii, vi, iv (e) None of these

107. While the Supreme Court has _____ the detention of the accused in jail, their house arrest is only a limited _____. The truth is that the accused will have to face a never-ending oppressive _____process which, once initiated, consumes life and is destructive of one's pride and dignity.

(i) disdain (ii) legitimate (iii) interdicted
(iv) consolation (v) prosecutorial (vi) suppressed
(a) ii, i, vi (b) iv, i, v (c) v, vi, i
(d) iii, iv, v (e) None of these

Directions (108-110): Given below are six sentences (A) (B) (C) (D) (E) and (F). Answer the following questions after rearranging the following sentences into a coherent paragraph.

(A) Tests of Ganga water indicate it has fared better in Uttar Pradesh; but then, the clean-up plan for the river has received dedicated Central funding of Rs.3,696 crore over three and a half years, compared to Rs.351 crore given to 14 States to conserve 32 rivers.
(B) The finding of the Central Pollution Control Board that the number of critically polluted segments of India's rivers has risen to 351 from 302 two years ago is a strong indictment of the departments responsible for environmental protection.
(C) Their problems are worsened by the poor infrastructure available in a large number of cities and towns located near rivers. It is notable that these results come from a CPCB audit that was carried out at the instance of the National Green Tribunal.
(D) The data show that the plethora of laws enacted to regulate waste management and protect water quality are simply not working.
(E) The failed efforts to control pollution are all too evident in Maharashtra, Gujarat and Assam, which account for a third of the degraded river segments.
(F) The study also underscores the failure of many national programmes run by the Centre for river conservation, preservation of wetlands, and water quality monitoring.

108. Considering statement (A) "**Tests of Ganga water indicate it has fared better in Uttar Pradesh; but then, the clean-up plan for the river has received dedicated Central funding of Rs.3,696 crore over three and a half years, compared to Rs.351 crore given to 14 States to conserve 32 rivers**"as the fourth sentence of the rearranged paragraph, then which among the following becomes the SECOND sentence after rearrangement?
(a) F (b) C (c) E
(d) D (e) B

109. Considering statement (A) "**Tests of Ganga water indicate it has fared better in Uttar Pradesh; but then, the clean-up plan for the river has received dedicated Central funding of Rs.3,696 crore over three and a half years, compared to Rs.351 crore given to 14 States to conserve 32 rivers**" as the fourth sentence of the rearranged paragraph, then which among the following becomes the LAST sentence after rearrangement?
(a) F (b) C (c) E
(d) D (e) B

110. Among the following pairs which one of them is formed with two consecutive statements after the rearrangement?
(a) D – E (b) F – C (c) B – F
(d) A – D (e) B – D

111. Choose the word which is most nearly the **SAME** in the meaning to **SALUBURIOUS**.
(a) Exorbitant (b) Quandary (c) Enigma
(d) Salutary (e) Outrageous

112. Choose the word which is most nearly the **OPPOSITE** of **CAMOUFLAGE**.
(a) Debunk (b) Indignant (c) Vapid
(d) Anemic (e) Candid

Directions (113-115): In each of the following questions, a sentence is written in four different ways conveying the same meaning and following the correct grammar structure. Choose the sentence among the four options which is grammatically incorrect or carrying a grammatical/idiomatic error in it as the answer. If there is no error in any of the sentences, choose (e), i.e. "All are correct" as the answer.

113. (a) Two months ahead of the State Assembly elections, widespread discrepancies have been detected in the electoral rolls of Rajasthan with doubts that the names of many legitimate voters have been struck off the lists.
(b) Extensive inconsistencies have been found in the electoral register of Rajasthan with the doubts that the names of many legitimate voters have been removed from the voter lists when two months are left for the State Legislative Assembly.
(c) The doubts that the names of many legitimate voters have been struck off the lists have been precipitated due to the detection of widespread discrepancies in the electoral rolls of Rajasthan just two months ahead of the State Assembly elections.
(d) Removal of names of a few legitimate voters from the voter lists have raised doubts about the widespread consistencies in the electoral rolls of Rajasthan.
(e) All are correct

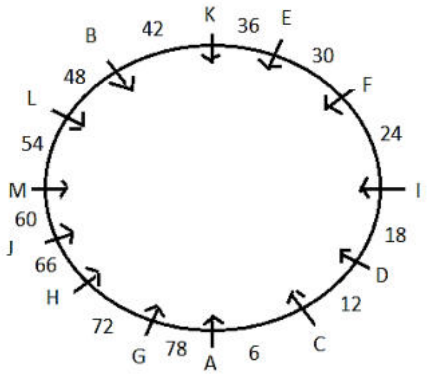
114. (a) At the time as Punjab Chief Minister Amarinder Singh emphasized on Monday that nobody involved in sacrilege cases would be spared, the Shiromani Akali Dal-BJP combine has decided to meet the Governor over the 'deteriorating law and order' situation in the State of Punjab.
(b) The Shiromani Akali Dal-BJP combine has decided to meet the Governor over the 'deteriorating law and order' situation in the state of Punjab because Punjab Chief Minister Amarinder Singh emphasized on Monday that nobody involved in sacrilege cases would be spared.
(c) While Punjab Chief Minister Amarinder Singh insisted on Monday that nobody involved in sacrilege cases would be spared, the Shiromani Akali Dal-BJP combine has decided to meet the Governor over the 'deteriorating law and order' situation in the State of Punjab.
(d) During the time that Punjab Chief Minister Amarinder Singh insisted on Monday that nobody involved in sacrilege cases would be spared, the Shiromani Akali Dal-BJP combine has decided to meet the Governor over the deteriorating law and order' situation in the State of Punjab.
(e) All are correct

115. (a) The AAP, having made efforts to make peace with "rebels" and "former leaders", has reached out to ex-Punjab convener Sucha Singh Chootepur, two years after he was sacked on charges of taking bribe for allotting party tickets.
(b) The AAP, as part of its efforts to make peace with "rebels" and "former leaders", has reached out to ex-Punjab convener Sucha Singh Chhotepur, two years after he was sacked on charges of taking bribe for allotting party tickets.
(c) The AAP, with an intent to reconciliate with "rebels" and "former leaders", has approached ex-Punjab convener Sucha Singh Chhotepur, two years after he was discharged on charges of taking suborn for allotting party tickets.
(d) The AAP, to reconciliate with "rebels" and "former leaders", has approached ex-Punjab convener Sucha Singh Chhotepur, two years after he was dismissed against taking bribe for allotting party tickets.
(e) All are error

Solutions

REASONING ABILITY

Directions (1-5):
Sol.



1. (d); 2. (c); 3. (c);

4. (b); 5. (a);

6. (c); Non –biodegradable nature of plastic bag can't be correlated with the statement because the statement does not say whether plastic is biodegradable nor non-biodegradable. Hence, I is not implicit. But II is obviously implicit. That is why the scientist uses the word 'Beware' in his statement before asserting the negative features of plastic.

7. (a); Option (a) may be the cause of vacant seat in the engineering colleges because due to the recession, the number of jobs available are decreasing day by day, hence the unemployment is increasing in the engineering sector. So (a) is the correct option.

8. (b); Option (b) may be a possible effect of big pig holes developed on the roads.

Direction (9-13):
From the above given conditions the matrix will be---

Rows↓/Column→	A	B	C	D	E
#	13	26	39	52	65
%	11	22	33	44	55
@	28	35	42	49	56

9. (c); x =#C %D #A #E
So, x=39 44 13 65
As it is clear that condition (2) is applicable in the above ques so the outcome will be—
Outcome= 3*4*1*6=72
As the outcome is below 85, so clearly P will blink.

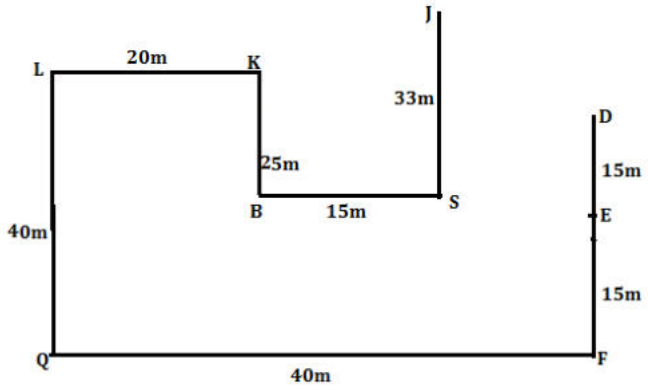
10. (d); X = @A @C #D %B
So, X = 28 42 52 22
As it is clear that condition (1) is applicable in the above ques so the outcome will be—
Outcome=28+42+52+22=144
As the outcome is 111-210, so clearly R will blink.

11. (c); X = #A%E %A @B
So, X = 13 55 11 35
As it is clear that condition (3) is applicable in the above ques so the outcome will be—
Outcome= 3*5*1*5= 75
As the outcome is below 85, so clearly P will blink.

12. (d); X =@A#B@D%C
So, X = 28 26 49 33
As it is clear that condition (4) is applicable in the above ques so the outcome will be—
Outcome= 28+26+49+33=136
As the outcome is 111-210, so clearly R will blink.

13. (a); X = @E#D@D#E
So, X = 56 52 49 65
As it is clear that condition (4) is applicable in the above ques so the outcome will be—
Outcome= 56+52+49+65=222
As the outcome is greater than 210, then S blink.

Direction (14-18):



14. (d); 15. (e); 16. (d);

17. (d); 18. (d);

Direction (19-23):
Only two persons are senior than A. The one who is junior than only one person likes Litchi. The one who likes Mango is senior than B. F likes Guava and is junior than B. B does not like Litchi.

Designations	Persons	Fruits
CMD		Mango/
MD		Litchi
CEO	A	Mango/
COO	B/	Mango/
SE	B/	
JE		

The one who is JE neither likes Banana nor Grapes. The one who likes Kiwi is junior than D. The one who likes Kiwi is not JE. F likes Guava and is junior than B. E does not like Kiwi and junior than C but senior than F. So, clearly F is JE.

Designations	Persons	Fruits
CMD		Mango/
MD		Litchi
CEO	A	Mango/
COO	B/	Mango/
SE	B/	
JE	F	Guava

D does not like Litchi and also is not SE. E does not like Kiwi and junior than C but senior than F. D is junior than the one who likes Banana. C is not junior than the one who likes Grapes. The one who likes Kiwi is just junior than D.

Designations	Persons	Fruits
CMD		Mango/ Banana
MD		Litchi
CEO	A	Mango/Banana
COO	D	Mango/
SE	B	Kiwi
JE	F	Guava

E does not like Kiwi and junior than C but senior than F. D is junior than the one who likes Banana. A does not like Banana. The one who likes Grapes is senior than the one who likes Mango. So, the final arrangement is---

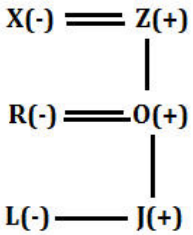
Designations	Persons	Fruits
CMD	C	Banana
MD	E	Litchi
CEO	A	Grapes
COO	D	Mango
SE	B	Kiwi
JE	F	Guava

19. (e); 20. (c); 21. (a);

22. (e); 23. (e);

Direction (24-28):

Years	Persons
1978	Z
1982	X
1995	O
1997	R
2013	J
2015	L

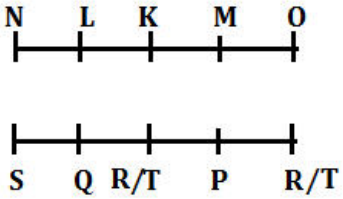


24. (c); 25. (c); 26. (a);

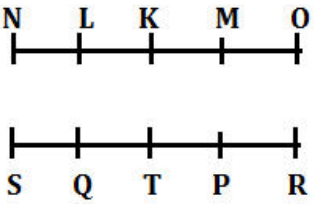
27. (a); 28. (c);

Directions (29-31):

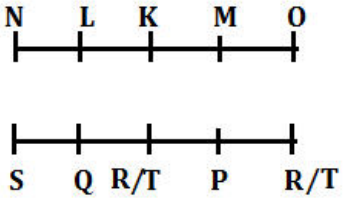
29. (b); From I and III,



30. (d); From I, II and III



31. (b); From I and III,



32. (a); For I- This statement supports the given statement as it describes that the authority's report also has detailed guidelines for museums to tackle different kinds of threats as given in the statement that Disaster management systems can safeguard India's heritage.

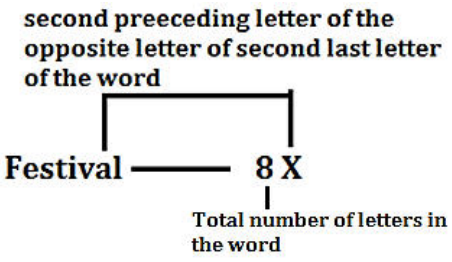
For II- This statement supports the given statement as it describes that analysis of NDMA shows that India's museums face lists terrorism and climate-related events which is also mentioned in the given statement.

For III- This statement does not support or negates the given statement as it describes that Climate-related issues are not a matter of concern for Indian Heritage whereas the given statement states that India's Disaster management systems can safeguard its' heritage from climate changes.

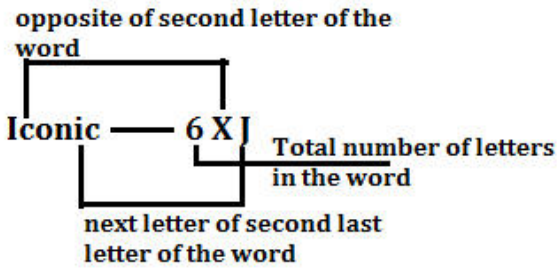
Direction (33-37):

Let us understand the logic behind the given coding decoding

Case-1: If the first letter of the code is consonant-



Case-2: If the first letter of the code is vowel-



33. (c); 34. (d); 35. (b);

36. (e); 37. (b);

38. (a); It is clear from the above that statement I is the cause and II is it's effect as this will be the cause that Infosys is planning to hire workers and for that it will hire graduates and will create talent pools will be it's effect.

39. (b); It is clear from the above statement that II is cause and I is it's effect because the PAN has become more vulnerable that is why Aadhar has become mandatory for filing Income Tax.

40. (a); (i) most accurately defines term "implicit bias" as the word automatic was used which is similar to the term "unintentionally racist" used by researchers.

Directions (41-45):

Floor			
6	A		
5	J		D
4	F	B	G
3	N	H	L
2	E	K	C
1	O	M	I

41. (e); 42. (d); 43. (e);

44. (c); 45. (b);

QUANTITATIVE APTITUDE

46. (a); Let Abhi and Chintu received 100x & 100y calls respectively
So ATQ
80x + 80y = 360
x + y = 4.5
Total calls = 100x + 100y = 450
Abhi could receive maximum calls = 445
As Chintu resolved 80% of calls, and therefore, we will get an integer value when he atleast get 5 calls.
So maximum calls that were not resolved
$\Rightarrow 445 \times \frac{20}{100} = 89$

47. (e); Call received by Bindu on monday = $\frac{180}{60} \times 100$
= 300
Query resolved by Abhi on Monday
$\frac{300}{5} \times 4 = 240$
Calls received by Abhi on Monday
$\Rightarrow \frac{240}{75} \times 100 = 320$

48. (d); Let calls received by Bindu and Chintu on Monday be 100x and 100y respectively.
Calls received by them on Friday 120x and 120y respectively.
Now query resolved
Monday → 60x + 90y
Friday → 60x + 96y
ATQ,
$\frac{60x+96y}{2} - \frac{60x+90y}{2} = 30$
3y = 30
y = 10
Required answer → 10 × 20 = 200

49. (c); Let query resolved by Abhi, Bindu and Chintu 300x, 400x and 200x respectively
Required ratio
$\Rightarrow \frac{300x}{80} \times 100 : \frac{400x \times 100}{50} : \frac{200x \times 100}{80}$
15 : 32 : 10

50. (b); Let call received by Chintu on Monday → 100x
Query resolved by Chintu on Monday → 90x
Query resolved by Chintu on Friday → $\frac{90x}{60} \times 100$
= 150x
Query resolved by Abhi on Friday ⇒ 90x + 150x
⇒ 240x
Call received by Abhi on Friday =
$\frac{240x}{80} \times 100 = 300x$
Required % = $\frac{300x-100x}{100x} \times 100 = 200\%$

51. (b); Let number of pink and Green balls is P and G respectively
P + G = 16
(A) → P(P) < 0.1875
$P(P) < \frac{3}{16}$
So it explains that P should be 1 or 2
(B) → we cannot conclude anything from this statement
(C) → Now difference of P and G is given = 12
But we don't know which one is greater.
So,
By using (A) and (C) together we can answer the question.

52. (d); Let speed of boat and stream be x and y respectively

(A) $\rightarrow \frac{270}{(x+y)} + \frac{270}{(x-y)} = 27$

(B) $\rightarrow x + y = 45$ km/hr

(C) $\rightarrow x - y = \frac{90}{7}$ km/hr

By using any two statements we can give answer.

53. (e); From statement (a)

$b = \frac{1}{a^{-5}}$

$b = a^5$

we can conclude that sign of both a and b is same.

If a is positive, then b is greater than a.

If a is negative, then b is less than a.

We can't answer question from statement (a) alone.

From statement (b)

$a < 0$

Nothing can be concluded.

From statement (C)

$|b| > |a|$

There are 4 cases:

(i) When b is positive and a is negative, then b>a.

(ii) When a is positive and b is negative, then a>b.

(iii) Again if both are positive than b> a

(iv) If both are negative than b< a.

From statement (a) and (b)

$a < 0$

Hence b< a.

And we can answer question.

From statement (b) and (c)

We only know that a is negative and nothing about sign of b. Hence it can't be answered.

From statement (a) and (c)

We also can't answer.

Statement (a) and (b) are sufficient to answer the question.

54. (a); Quantity I $\rightarrow [(1333)^{27}]^{55}$

Unit digit $\rightarrow (1333)^{1485}$

Number whose last digit is '3' has last digit change in a sequence

$1 \rightarrow 3$

$2 \rightarrow 9$

$3 \rightarrow 7$

$4 \rightarrow 1$

$5 \rightarrow 3$

And so on

For 1485 $\rightarrow$ last digit $\rightarrow$ 3

Quantity II — $[(127)^{43}]^{52}$

$\Rightarrow [(127)]^{2236}$

For 7 $\rightarrow$

$1 \rightarrow 7$

$2 \rightarrow 9$

$3 \rightarrow 3$

$4 \rightarrow 1$

$5 \rightarrow 7$

For 2236 it is $\rightarrow$ 1

Quantity II < Quantity I

55. (a); **Quantity I:**

Let length of rectangle = L

Breadth of rectangle = b

Radius of circle = $\frac{b}{2}$

Now,

$L \times b = 2 \times \pi \left(\frac{b}{2}\right)^2$

$L = \frac{\pi b}{2}$

$\% \Rightarrow \left(\frac{\frac{\pi b}{2} - b}{b}\right) \times 100 = \frac{4 \times 100}{7} = 57\frac{1}{7}\%$

Quantity II:

Square get change into the rectangle.

By increasing 10 cm two opposite sides, Area increased $\rightarrow$ 400

Side $\rightarrow \frac{400}{10} = 40$ cm

Area of square = 40*40= 1600 square cm.

% by which area increase $\rightarrow \frac{400}{1600} \times 100 = 25\%$

Quantity I > Quantity II

56. (d); PQ = R + Q

From statement (A)

P + R = 8 + Q

R = (8 + Q – P)

From Question

PQ = 8 + Q – P + Q = 8 + 2Q – P

It can't be solved further.

From statement (B)

$Q^2 = \frac{R^2}{P+1}$

$Q = \frac{R}{(P+1)^{\frac{1}{2}}}$

Now using the information from question

$P\left(\frac{R}{(P+1)^{\frac{1}{2}}}\right) = R + \frac{R}{(P+1)^{\frac{1}{2}}}$

On solving we will get P = 3.

Put this value in equation:

$Q = \frac{R}{(P+1)^{\frac{1}{2}}}$

Q = R/2

Put this value and P = 3 in equation given in question

3R/2 = R + R/2

Hence we can't solve it further.

From statement (C)

Q = P + 2

And it can't be solved further.

Using information from statement (B) and (C) we can calculate Q= 5 and R= 10. Hence question can be answered.

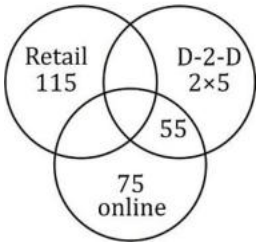
Similarly, we can answer question using statement (A) and (c) as there are three equations and three variable. (third equation given in the question can be used)

Or from statement (A) and (B).

Hence question can be answered from any two statements.

57. (e); **From A** → Let selling price of 4 pens = 12x
Cost price of 4 pens = $12x \times \frac{2}{3} = 8x$
Profit earned on 4 pens = 12x- 8x = 4x
Cost price of 3 books = 12x
Profit earned on selling 2 pens = 2x
Profit earned on selling 1 pen = x
Profit earned on selling one book = 2x
Profit earned on selling 2 books = 4x
Required profit percentage= $\frac{x+4x}{2x+8x} \times 100 = 50\%$
From B → Let selling price of 2 books and 6 pens be 12x and 18y respectively.
If profit % is 50 , we can calculate total profit i.e. $\frac{1}{3}$ (12x + 18y) = 4x+ 6y.
This profit is equal to 500 % of CP of 1 pen.
But we don't know CP of a pen, hence we can't calculate further.
From C→ let cost price of pen is 'a' and cost price of book is 'b'
Therefore, selling price of a book is b + a. We can't calculate further.
Now combining the statement B and C
b + a = 6x
$\frac{500}{100}$(a) = 5a = 4x + 6y
We can't solve it further, as we don't know whether profit or loss earned on selling the pen.
Statement '**A**' alone is sufficient to answer the question, but statement '**B**' alone is not sufficient to answer the questions.

Solutions (58-62)
Let total people → 100x
People working in Retail stores → 72x
People working in only door to door → 2x
People working in only online store ⇒ 2x + 65
People working in online and door to door but not in retail = 55
Also
(100x – 72x – 2x) – (2x + 65) = 55
24x – 65 = 55
24x = 120
x = 5
Total number of people working in retail store → 72 × 5 = 360



People working in only retail store → $75 \times \frac{46}{30} = 115$

58. (b); Number of people working in retail store → 360
People working only in retail store = 115
Required number = 360 – 115 = 245

59. (e); Total people → 100 × 5 = 500

60. (c); People working in online store
Only = 75

61. (a); People working in both retail and door to door stores
= 360 – 115 – 105 = 140
Required % = $\frac{140\times100}{500} = 28\%$

62. (d); People working in Retail or online store = 500 – 10 = 490
People working in only online or only retail
⇒ 75 + 115 = 190
% ⇒ $\frac{490}{190} \times 100 = 257\frac{17}{19}\%$

63. (c); Selling price of article I ⇒ 80 × 800 = 64000
II ⇒ 160 × 600 = 96000
III ⇒ 240 × 400 = 96000
Let commission % be (a – 1), a and (a + 1) respectively.
ATQ,
$64000\frac{(a-1)}{100} + \frac{96000(a)}{100} + \frac{96000(a+1)}{100} = 32000$
a = 12.375%
highest commission = 13.375%

64. (d); Total commission earned by C = 35000 Rs.
Total selling price of product I = 105 × 200
= 21000 Rs.
Total selling price of Product II = 105 × 300
= 31500 Rs.
Total selling price of Product III = 105 × 400
= 42000 Rs.
Let commission percent = x%
$(21000 + 31500 + 42000) \times \frac{x}{100} = 35000 = \frac{1000}{27}\%$

65. (a); Total commission of D = $\frac{35000\times8}{7}$ = Rs . 40000.
S.P. of each product = 100 × 800 = Rs. 80000
Let commission % charged on 3 products be (x – 5) %, x% and (x+5) %.
So,
$80000\frac{(x-5)}{100} + 80000\frac{(x)}{100} + 80000\frac{(x+5)}{100} = 40000$
2400x = 40000
$x = \frac{400}{24} = \frac{100}{6}\%$
$x = 16\frac{2}{3}\%$
Least range could be = 16 – 5 = 11%
16 + 6 = 22% = (11 – 22)

66. (d); Let total articles = x
So S.P. = x
Now total commission ⇒ 35000
Minimum values of x = 100
Maximum value of x = 109
Let 'a' be commission %
So, Max value of 'a' could be
$(100 \times 100) \times \frac{a}{100} = 35000$
a = 350%

Minimum value could be
$109 \times 109 \times \frac{a}{100} = 35000 \approx 294.5$
Range = (294 – 350)

67. (b); Total population in X and Z is 16000 and 12800
Population in Y $\Rightarrow \frac{16000}{4} \times 5 = 20{,}000$
Cycle manufactured by A, B and C = 16000 + 12800 + 20000 = 48800
Total cycle manufacture by A = $\frac{48800}{61} \times 22 = 17600$
By B = $\frac{48800}{61} \times 19 = 15200$
By C = $\frac{48800}{61} \times 20 = 16000$
Cycle supplied by A = $\frac{60}{100} \times 17600 = 10560$
By B = $\frac{75}{100} \times 15200 = 11400$
By C = $\frac{80}{100} \times 16000 = 12800$
Cycle supplied in Y = 10560 + 11400 + 12800 – 16000 – 12800 = 5960
Revenue = 8000 × 5960 = 47680000 = 4.768 cr.

68. (d); Total revenue = 9.6 cr
Total cycle supplied = $\frac{\text{Revenue}}{8000} = \frac{9.6 \text{ cr}}{8000} = 12000$
Cycles supplied by C = $\frac{12000}{3} = 4000$
Total profit = 4000 × (8000 – 6000) = 80 lakh

69. (c); Total cycles manufactured by A = 17600
Total cycles manufactured by C = 16000
Cycle remained with A = 17600 – 10560 = 7040
Cycle remained with C = 16000 - 12800 = 3200
Cycles delivered by manufacturer A or number of cycles demanded from manufacturer A
= (50×7040)/100=3520
Similarly,
New number of supplied by C = $\frac{3200 \times 10}{100} = 320$
Total revenue of A and C = (10560 + 3520+ 12800 + 320) × 8000
= 21.76 crore.
Total manufacturing cost by A and C
= (17600 + 16000) × 6000 = 20.16 cr.
Required % = $\frac{21.712}{20.16} \times 100 \approx 107\%$

70. (a); Bill paid by Rahul in year 2015
= $\frac{(1200+1400)}{2} \times \frac{125}{100}$ = Rs 1625
Amount paid by him in FD = 1200 × 2 = Rs 2400
Required difference = 2400 – 1625 = Rs. 775

71. (d); Total amount paid by Rahul on Food in year 2011 and 2012 together
= 1000 + 1400 = Rs 2400
Total amount paid by him on shopping in same year together
= 1200 + 1000 = Rs 2200
Required percentage = $\frac{2400-2200}{2200} \times 100 = 9\frac{1}{11}\%$

72. (b); Amount paid by Rahul on Rent in year 2010
= $\frac{1}{5}[800 + 1000 + 1200 + 1000]$
= $\frac{1}{5}[4000]$ = Rs 800
Required ratio = $\frac{800}{1000} = 4 : 5$

73. (e); Amount paid by Rahul on Bill in 2015
= $\frac{1200}{2} \times 3$ = Rs 1800
Required difference = $\frac{1800}{2} \times 3$ = Rs 2700

74. (b); Average amount paid by Rahul in FD Rent and Food in year 2012
= $\frac{800+1000+1400}{3}$ = Rs $\frac{3200}{3}$
Average amount paid by Rahul on Shopping, Rent and Bill in year 2013
= $\frac{600+1200+1200}{3} = \frac{3000}{3}$ = Rs1000
Required percentage = $\frac{3200}{3000} \times 100 = 106\frac{2}{3}\%$

75. (a); **Quantity I**:
1 man = 2 women
∴ 8 men + 4 women = 20 women
4 men + 8 women = 16 women
20 women's 2 days' works = $\frac{2}{6} = \frac{1}{3}$ part
Remaining work = $1 - \frac{1}{3} = \frac{2}{3}$
∵ 20 women complete 1 work in 6 days
∴ 16 women will do $\frac{2}{3}$ work in $\frac{20\times6}{16} \times \frac{2}{3} = 5$ days
Quantity II: 5 days
⇒ **Quantity I = Quantity II**

76. (d); Let the speed of X be x kmph. Distance travelled by X in 2 hours = 2x km.
Suppose X takes 't' hours to travel $\frac{1}{5}^{\text{th}}$ of the distance AB.
Y would take (t–2) hours to travel $\frac{1}{5}^{\text{th}}$ of the distance AB.
As Y's speed is thrice that of X's speed.
$\frac{t-2}{t} = \frac{1}{3}$
t = 3
$\frac{1}{5}^{\text{th}}$ of the distance AB = 3x km.
AB =15x km
Time taken by x to cover 15x km = $\frac{15x}{x} = 15$ hours
Time taken by Y to cover 15x km = $\frac{15x}{3x} = 5$ hours.
∴ Difference in the time = 10 hours.
Quantity I : Difference in the time = 10 hours.
Quantity II : 12 hours
Quantity I < Quantity II

77. (e); After 20% of the contents of the vessel are removed,
Remaining contents = $\frac{80}{100}(12.5) = 10$ litres.
Ratio of water and milk in it = 1 : 4.
∴ It contains $\frac{4}{5}(10) = 8$ litres of milk and 2 litres of water.

To reverse the ratio, 2 litres of water must be made 32 litres.
∴ x = 30 litres of water must be added.
To reverse this ratio again 8 litres of milk must be made 4(32) = 128 litres.
∴ y = 128 – 8 = 120 litres of milk must be added.
Quantity I: 'y' = 120 litres
Quantity II: 'x' = 30 litres
Quantity I > Quantity II

Direction (78-80):
Let investment of Rahul, Sandy and Sati be 2x, 3x and 4x respectively.
Ratio of profit

Rahul	:	Sandy	:	Sati
2x × 4	:	3x × 4	:	4x × 10
+(2x – 800)×6		+(3x+1500)× 6		+(5x × 2)
+(5x–800)× 2		(9x +1500) × 2		
30x – 6400	:	48x + 12000	:	50x

ATQ,
$\frac{50x}{128x+5600} = \frac{125}{376}$
$\Rightarrow$ x = 250
Ratio of profit share of Rahul, Sandy and Sati is
1100 : 24000 : 12500 → 11 : 240 : 125

78. (a); Required percentage = $\frac{240}{376} \times 100$
= 63.829% ≃ 64%

79. (d); Required difference = $\frac{240-11}{376} \times 37600 = 22{,}900$
= 22,900

80. (c); Investment of Veer
$= 4 \times 250 \times \frac{350}{100} = 3500$
Interest earned by Veer
$= 3500\left[1 + \frac{20}{100}\right]^2 - 3500 = 1540$

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81. (d); Though the economic lucrativeness of innovation is described in the whole passage through the idea of success of business but being specific the answer can be derived from the first paragraph of the passage where it is mentioned that innovation is a process of turning a creative idea into reality. Innovation drives economic growth. ". Innovation is not only important on the individual level, but can make or break a business as well."

82. (e); Both the options (b) and (c) are correct .Refer to paragraph 2 where it is given that if a business is not innovative, companies risk losing work to competitors. Furthermore the text is also quoted as, "Lack of innovation also has indirect results such as losing staff and decreasing engagement." Thus innovation cannot be an afterthought but rather a crucial element that is included in part of your strategy. Hence option (e) is the correct choice.

83. (d); Options (a) and (b) are the statements which infer the meaning that has been asked in the given question. Refer to the third paragraph where the starting line of the paragraph itself is, "The era of invention is not over, but it has definitely been pushed aside for an era of innovation." It is also given that businesses have discovered that innovation seems to not only trump invention in furthering a company's brand and profitability, but it can be far cheaper when all the framework is already completed.

84. (c); The most appropriate answer here is option (c).Refer to the last paragraph of the passage where it is given Sony's influence in the technology market is through creativity and perseverance. Furthermore in the third paragraph it is mentioned that businesses like Apple and Sony choose to innovate rather than invent. The text is quoted as, "Sony shows corporations that for a business to thrive in today's market, a company cannot stay stagnant with on particular item – innovations are essential. Innovation drives economic growth."

85. (a); Option (a) articulates statement (A) in the most precise manner. To understand the given statement, hint from the following statement can be drawn "Innovation is not only important on the individual level, but can make or break a business as well" which explains the importance of innovations in a business. Therefore, one should be careful enough while developing a successful and worthy innovation. Thus, option (a) is the most suitable answer choice.

86. (c); Option (c) can be aptly inferred from the sentence [B] as the idiom "to color outside the lines" means to think or act in a way that does not conform to set rules. Therefore, in context to the passage it can be understood that innovations play a vital role in surviving the business in the dynamic market. Therefore, the businessmen try to introduce new innovations even though it bears risks for the business. Hence, option (c) is the most suitable answer choice.

87. (b); Option (b) is the most appropriate sentence to replace the grammatically incorrect statement [C]. It is to be noted that determiners are words placed in front of a noun to make it clear what the noun refers to. Here, since the associated noun is singular [The era], the determiner [it] and the verb [has] should be in their singular form as well. Moreover, option (a) stands incorrect due to improper usage of the preposition "to". Hence, option (b) becomes the most suitable answer choice.

88. (d); The statement clearly mentions the driving factor for innovation i.e. customer satisfaction [...**based on the needs and desires of the consumer].** All the other options are irrelevant. Hence, option (d) is the most suitable answer choice.

89. (c); The only correct answer here is option (c). Refer to paragraph 1 where it is mentioned that Maharashtra's appellate authority for advance ruling (AAAR) has held that solar power projects are liable to 18% goods and services tax (GST) and not at the lower rate of 5% as claimed by power producers. Thus, this issue seems to be headed for a prolonged legal battle unless the government decides to step in and issue clarity on the taxability on solar power projects. This statement also makes option (a) wrong making suitability of option (c) correct.

90. (d); Only option (d) is the most suitable choice. Refer to paragraph 1 where it is given that government proposal to levy safeguard duty on imported solar panels that is meant to support domestic panel manufacturers is another factor that has brought **some uncertainty** to solar power project developers.

91. (c); Option (c) is the correct choice here. The answer can be deduced from the paragraph 2 where the text is quoted directly as, "The AAARs have held that setting up of solar projects are covered under the classification of works contract as they consist of supply of goods and services packaged into an immovable property." They held that because of this, these projects are liable to be taxed at 18% that applies to works contracts.

92. (d); The appropriate answer here is option (d). Refer to the third paragraph where it is given that over years, massive fluctuations have been observed in the prices and availability of coal which led to high litigation cost and increase in the power rate due to which several projects were landed in debt trap. Hence industry executives fear that the same could happen in the solar sector if there is no stability on tariff and clarity on regulations.

93. (b); Refer to the last paragraph where it is given that the intense competition in recent years has driven down the solar power tariff as discovered in the solar project auctions. Furthermore, the text is highlighted as, "The factors that helped producers to bid projects aggressively include the lower price of imported solar panels and efficient financial structuring of projects."

94. (e); The given statement [A] is grammatically correct and contextually meaningful. Hence, it does not require any corrections. Therefore, option (e) is the most suitable answer choice.

95. (a); The given statement [B] judges the future of the solar project industry by finding its similarities with the coal power industry in the policy formulation. Since, option (a) provides information on the instability of the tariff and cost in solar industry just like coal power industry, it strengthens the given statement. All the options are irrelevant in context of statement [B]. Hence, option (a) is the most suitable answer choice.

96. (d); The most appropriate clause that will complete the sentence to frame it in a correct contextual and grammatical manner is **"for at least three years and five years respectively, against the existing norm of one year"**. The sentence is describing about the Supreme Court directive to make the owners of new car and two wheeler purchase insurance covers. Since, it's a new directive, option (d) perfectly fits the blank as it describes the earlier as well as the improvised time period for which the insurance must be covered. All the other options are incoherent to the context of the sentence. Hence, option (d) is the most suitable answer choice.

97. (b); The most appropriate clause that will complete the paragraph is "**92% of the people belonging to the community are subjected to economic exclusion**." The paragraph is describing about a survey conducted of the transgender community by the NHRC. Since the previous clause mentions"...found that", the latter part must express the outcome or the findings of the survey. This rationale is satisfied by only option (b). Options (a) and (c) are contextually incorrect while option (d) is grammatically incorrect. Therefore, option (b) is the most suitable answer choice.

98. (a); The most appropriate clause that will complete the paragraph is option (a) "**as reported by the media recently, has escalated the contention"** as the initial part of the paragraph has mentioned about the accumulated unfilled jobs in the public sector. Part (A) of the paragraph acts as a cause for the effect mentioned in option (a). All the other options are either grammatically incorrect or contextually meaningless. Hence, option (a) is the most suitable answer choice.

99. (c); The most appropriate clause that fills the blank of the paragraph is option (c) "**Emerging market economies continue to be in the spotlight for the wrong reasons**" as it acts as a perfect introduction for the paragraph. The paragraph is pointing out the devaluation of the rupee against the dollar; therefore, option (c) will aptly introduce the paragraph stating the fall of emerging market economies. However, option (a) and (d) are contextually meaningless, while, option (b) is grammatically incorrect. Hence, option (c) is the most suitable answer choice.

100. (b); The most appropriate phrase that completes the paragraph coherently is "**is vulnerable to several natural hazards**", as the paragraph is describing about the about the geographical characteristics of Kerala which makes it vulnerable foe several natural hazards. The latter part of the paragraph already states the hazards that are prone to Kerala, therefore, the phrase "is vulnerable to several natural hazards" aptly fits in the blank. All the other phrases are irrelevant to the context of the sentence. Hence, option (b) is the most suitable answer choice.

101. (e); All the three starters can be used to frame a meaningful sentence without altering the intended meaning of the given sentences. Hence option (e) is the correct choice.

(i) Given how unmanned or remotely piloted aircraft, commonly known as drones, hold immense promise for various commercial applications, the government has done well to set up a regulatory framework for drone operations, including commercial use.

(ii) Since unmanned or remotely piloted aircraft, commonly known as drones, hold immense promise for various commercial applications, the government has done well to set up a regulatory framework for drone operations, including commercial use.

(iii) Provided that unmanned or remotely piloted aircraft, commonly known as drones, hold immense promise for various commercial applications, the government has done well to set up a regulatory framework for drone operations, including commercial use.

102. (a); Only starter (i) can be used to frame a meaningful sentence without altering the exact meaning of the given sentences. However, it is not possible to construct a contextual sentence using the third and second starter as they would alter the intended meaning. Hence option (a) is the correct choice.

(i) Convincing people to buy insurance for the expected life of the vehicle at the time of purchase, as in the case of road tax, interferes with the need to set premium based on data relating to safety and diligence of the driver, which would change over time.

103. (d); Both the starters (i) and (ii) can be used to frame a meaningful sentence without altering the exact meaning of the given sentences. However, it is not possible to construct a contextual sentence using the third starter as it would alter the intended meaning. Hence option (d) is the correct choice.

(i) Unless the country finds viable and sustainable replacements for its energy needs, international oil price movements will continue to be an important fault line in India's political economy.

(ii) Except that the country finds viable and sustainable replacements for its energy needs, international oil price movements will continue to be an important fault line in India's political economy.

104. (b); The most appropriate set of words that fills the blanks of the paragraph is "diversity, subsumed, legitimacy". "diversity" provides the precise context as it means a range of different things. Moreover, 'subsumed' means include or absorb (something) in something else; while 'legitimacy' means conformity to the law or to rules. All the other words are incoherent and fail to make the paragraph comprehensive. Hence, option (b) is the most suitable answer choice.

Socialism means a political and economic theory of social organization which advocates that the means of production, distribution, and exchange should be owned or regulated by the community as a whole.

Invigorated means give strength or energy to.

Astuteness means of keen penetration or discernment; sagacious: an astute analysis. clever; cunning; ingenious; shrewd

105. (d); The most appropriate set of words that fills the blanks of the paragraph is "ferrying, probe, glitch". "Ferrying" provides the precise context as it means transport from one place to another on short or regular trips. Moreover, 'probe' means a thorough investigation into a crime or other matter; while 'Glitch' means a sudden, usually temporary malfunction or fault of equipment. All the other words are incoherent and fail to make the paragraph comprehensive. Hence, option (d) is the most suitable answer choice.

Gremlin means an imaginary mischievous sprite regarded as responsible for an unexplained mechanical or electronic problem or fault.

Barging means move forcefully or roughly.

106. (c); The most appropriate set of words that fills the blanks of the paragraph is "contemporary, supplanting, "disconcerting". "Contemporary" provides the precise context as it means belonging to or occurring in the present. Moreover, 'supplanting' means supersede and replace; while

'Disconcerting' means causing one to feel unsettled. All the other words are incoherent and fail to make the paragraph comprehensive. Hence, option (c) is the most suitable answer choice.
Posterior means coming after in time or order; later
Superseding means take the place of (a person or thing previously in authority or use); supplant.
Bewildering means confusing or perplexing.

107. (d); The most appropriate set of words that fills the blanks of the paragraph is "interdicted, consolation, prosecutorial". "interdicted" provides the precise context as it means prohibit or forbid (something). Moreover, 'consolation' means the comfort received by a person after a loss or disappointment; while 'prosecutorial' means relating to the institution and conducting of legal proceedings against someone in respect of a criminal charge. All the other words are incoherent and fail to make the paragraph comprehensive. Hence, option (d) is the most suitable answer choice.
Disdain means the feeling that someone or something is unworthy of one's consideration or respect.
Legitimate means conforming to the law or to rules.
Suppressed means forcibly put an end to.

108. (d); Drawing a hint from the fourth sentence of the rearranged paragraph, it can be understood that it is describing about a study which reveals the data reflecting the increased pollution in the rivers in the entire nation. It further mentions about the problems associated in controlling pollution.
It should be noted that statement (B) appropriately introduces the paragraph by providing the data about the increase in the segments of river pollution. Statement (D) follows statement (B) as it mentions about the data mentioned in the previous statement indicating that the laws have not been implemented properly. Sentence (F) begins with the phrase "The study also…" which indicates that in the previous sentence the study has been mentioned. Hence it should follow sentence (D). Sentence (A) is the fourth sentence of the rearranged paragraph. Next is sentence (E) as it logically connects with sentence (A). Sentence (C) stands as the concluding part of the rearranged paragraph. The phrase in the statement (C) "It is notable that these results…" provides a clue for the conclusion of the paragraph. Hence, the logical sequence thus formed is, BDFAEC. Since, statement (D) is the second sentence in the rearranged paragraph, option (d) becomes the most suitable answer choice.

109. (b); Drawing a hint from the fourth sentence of the rearranged paragraph, it can be understood that it is describing about a study which reveals the data reflecting the increased pollution in the rivers in the entire nation. It further mentions about the problems associated in controlling pollution.
It should be noted that statement (B) appropriately introduces the paragraph by providing the data about the increase in the segments of river pollution. Statement (D) follows statement (B) as it mentions about the data mentioned in the previous statement indicating that the laws have not been implemented properly. Sentence (F) begins with the phrase "The study also…" which indicates that in the previous sentence the study has been mentioned. Hence it should follow sentence (D). Sentence (A) is the fourth sentence of the rearranged paragraph. Next is sentence (E) as it logically connects with sentence (A). Sentence (C) stands as the concluding part of the rearranged paragraph. The phrase in the statement (C) "It is notable that these results…" provides a clue for the conclusion of the paragraph. Hence, the logical sequence thus formed is, BDFAEC. Since, statement (C) is the last sentence in the rearranged paragraph, option (b) becomes the most suitable answer choice.

110. (e); Drawing a hint from the fourth sentence of the rearranged paragraph, it can be understood that it is describing about a study which reveals the data reflecting the increased pollution in the rivers in the entire nation. It further mentions about the problems associated in controlling pollution. It should be noted that statement (B) appropriately introduces the paragraph by providing the data about the increase in the segments of river pollution. Statement (D) follows statement (B) as it mentions about the data mentioned in the previous statement indicating that the laws have not been implemented properly. Since, statements (B) and (D) forms a perfect pair, option (e) becomes the most suitable answer choice.

111. (d); Salubrious means (of a place) pleasant; not run-down while Salutary means (especially with reference to something unwelcome or unpleasant) producing good effects; beneficial. Since they both are synonyms of each other, option (d) becomes the most suitable answer choice.
Exorbitant means (of a price or amount charged) unreasonably high.
Quandary means a state of perplexity or uncertainty over what to do in a difficult situation.
Enigma means a person or thing that is mysterious or difficult to understand.

112. (e); CAMOUFLAGE means hide or disguise the presence of (a person, animal, or object) by means of camouflage while CANDID means truthful and straightforward; frank. Since, they both are antonyms of each other; option (e) is the most suitable answer choice.
Debunk means expose the falseness or hollowness of (an idea or belief).
Indignant means feeling or showing anger or annoyance at what is perceived as unfair treatment.
Vapid means offering nothing that is stimulating or challenging; bland.

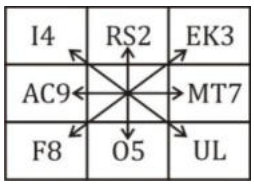
113. (d); Statements (a), (b) and (c) imply the following:
(i) Two months are left for the State Assembly elections;
(ii) Extensive inconsistencies or widespread discrepancies have been detected in the electoral rolls of Rajasthan.
(iii) There are doubts that the names of **many** legitimate voters have been struck off the lists.
But first of all, there is a grammatical error in the statement (d) which is the following:
The subject of the sentence of the statement (d) is 'removal of names of a few legitimate voters from the voter lists' which is **singular**. The subject, having **singular noun**, of the sentence is followed by the **auxiliary verb** 'have', which is used for a subject having **plural noun**.
Also, there are following contextual errors in the statement (d):
(i) Removal of the names of a few legitimate voters;
(ii) widespread **consistencies** in the electoral rolls of Rajasthan.
(iii) No mention of the phrase 'two months ahead of the State Assembly elections' or an equivalent to convey when would the Assembly elections would be held in Rajasthan.
Hence, option (d) is the correct answer because it is the only **incorrect** sentence.

114. (b); The two events happening are:
(i) The Shiromani Akali Dal-BJP combine has decided to meet the Governor over the 'deteriorating law and order' situation in the state of Punjab.
(ii) Punjab Chief Minister Amarinder Singh emphasized on Monday that nobody involved in sacrilege cases would be spared.
The statements (a), (c) and (d) starts with a conjunction or conjunction-phrase which are synonyms i.e., While, 'At the time as' and 'During the time that' are synonyms. They convey the same meaning that two events are occurring simultaneously.
But, the usage of the conjunction 'because' in the statement (b) implies that one event is causing another event to occur.
So, while the statements (a), (c) and (d) suggest that the events (i) and (ii) are occurring simultaneously and a sort of independently, the statement (b) suggests that the event (ii) has caused the event (i) to occur. So, contextually, statement (b) conveys a different meaning as compared to that conveyed by the statements (a), (c) and (d).
Hence, option (b) is the correct answer.

115. (a); The sentences (b), (c) and (d) are conveying the following:
(i) The AAP has reached out to ex-Punjab convener Sucha Singh Chhotepur.
(ii) The AAP wishes to make peace with "rebels" and "former leaders".
(iii) Mr. Sucha Singh Chhotepur was being approached by AAP two years after he was sacked on charges of taking bribe for allotting party tickets.
The above sentences (sentences (b), (c) and (d)) are suggesting that meeting with Sucha Singh Chhotepur was a part of an effort to make peace with "rebels" and "former leaders", but the sentence (a) suggests that AAP has already made (and completed) efforts to make peace with "rebels" and "former leaders", or the AAP has reached out to ex-Punjab convener Sucha Singh Chootepur after making (all) the efforts to make peace with "rebels" and "former leaders".
The meaning conveyed by the statement (a) is different from that conveyed by the statements (b), (c) and (d).
Moreover, the sentence (a) has a grammatical error. The subject of the sentence is a singular noun 'The AAP' which is followed by an auxiliary verb 'have' which is used for plural noun.
Hence, the correct answer is the option (a).

REASONING ABILITY

Directions (1-2): Study the following diagram and convert it into other diagrams by implementing the instructions which is given in each step to get next step.



Interchange the Alphabets to get step 1 as arrows mention in the above figure.

UL4	O2	F3
MT9		AC7
EK8	RS5	I

Step-1

For Step-2:

(i) If the alphabets contain one consonant and one vowel and the number with them is greater than 3, then subtract 3 from the given number.

(ii) If the alphabets are two consonant and the number with them is greater than 5, then change the letters with the previous letter in alphabetical series.

UL1	O2	F3
LS9		AC4
EK5	RS5	I

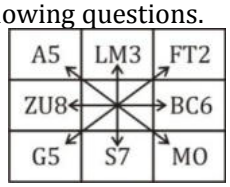
Step-2

For Step-3 : step 3 is coded in some special pattern.

EK5	R2	I
UL1		F3
LS9	WX5	AC4

Step-3

As per the rules followed in the above step, find out the appropriate steps for the given input.
And answer the following questions.



1. Which element comes in step-2 in the second column of third row?
(a) LM7 (b) KL7 (c) ZU3
(d) AB8 (e) None of these

2. Which element replaces AB8 in step-3?
(a) PQ7 (b) ZU3 (c) FT5
(d) MO2 (e) None of these

Directions (3-4): Read the following passage carefully and answer the questions that follow:

The Budget session began on a stormy note as opposition members demanding a debate on the recent hate crimes against Indians living in the USA. Congress blamed the Modi government for remaining silent on the attacks against Indians in US. In his reply, Union Home Minister said that the government has taken a serious note and PM will reply in next week of Parliament session. In recent weeks, at least two Indians have been killed in incidents of hate crime in the US. "Each attack involved a slogan. Go back to your country". America condemned it but is not taking any steps to address the issue.

3. What may be the repercussions after recent attacks on Indians in US?
(I) There may be impact on Indian-US trade policy.
(II) Indian Government will coerce US Government.
(III) American Govt. will give life imprisonment to accused to make a set mark that America is against racism.
(a) Only I (b) Only I and III
(c) Only III (d) Only I and II
(e) None of these

4. Which of the following substantiates the laxity of Indian-American Govt.?
(I) Modi govt. has taken a serious note and ready to reply in next week of parliament session.
(II) Condemning the attack but not taking any steps by American Govt.
(III) Still there is no action as racism slogan "Go back to your country" is spreading.
(a) Only III (b) Only I and II
(c) All of three (d) Only II
(e) None of these

Directions (5-7): Study the information carefully and answer the questions given below.

Eight members A, B, C, D, E, F, G and H sitting in a row facing north But not necessary in the same order. No two successive members are sitting together according to alphabetical order.

For Example: A does not sit with B. similarly B does not sit with C and so on.

They also have a hobby like Playing game, Watching TV, Singing, Dancing, Online surfing, Chatting, Acting and Cooking, but not necessary in the same order. Either A or H sits at the extreme end of the row. A is sitting third to the left of the person whose hobby is online surfing. B sits second to the right of the person who likes acting. C sits second to the right of F. G who likes watching TV is sitting second from the right end of the row. The person whose hobby is dancing is immediate neighbor of F who likes Playing Games. The person whose hobby is acting is not sitting adjacent to the person whose hobby is online surfing. C's hobby is neither acting nor online surfing. D and E do not sit any extreme end of the row. One of the immediate neighbors of H likes Cooking and the one whose hobby is singing sits at left end of the row. Neither H nor D likes Acting.

5. Which of the following member is sitting sixth to the right of the second from the right end of the row?
(a) E
(b) The one whose hobby is acting
(c) A
(d) The one whose hobby is cooking
(e) None of these.

6. A is related to B and F is related to E in the same way, the member whose hobby is dancing related to which of the following?
(a) The one whose hobby is acting
(b) G
(c) The one whose hobby is cooking.
(d) C
(e) B

7. Which of the following combination is not true?
(a) A-Singing
(b) E-Acting
(c) G-Watching TV
(d) B-Playing games
(e) D-Dancing

Directions (8-10): Study the information carefully answers the questions given below.
@ means either hour hand or minute hand is at 8
# means either hour hand or minute hand is at 5
$ means either hour hand or minute hand is at 4
% means either hour hand or minute hand is at 12
& means either hour hand or minute hand is at 2
£ means either hour hand or minute hand is at 3

Note: if two symbols are given than by default first symbol is consider as hour hand and second one is consider as minute hand. And all time are consider at PM.

For eg. @# ⟶ 8:25 pm

8. If A takes 25 min to reach railway station and his train is scheduled at #& then at what time should he leave to reach the station 5 minute earlier?
(a) $% (b) $& (c) &S
(d) $@ (e) £$

9. If a train departed from a station at &£ and it takes 2 hours to reach the destination then when it will reach to the destination?
(a) $£ (b) $% (c) #$
(d) $# (e) £$

10. A person has to catch a train that is scheduled to depart at '@%'. It takes the person 4 hours and 15 minutes to reach the railway station from his home. At what time should he leave from his home for the railway station to arrive at the station at least 25 minutes before the departure of the train?
(a) %@ (b) £$ (c) %+
(d) +@ (e) None of these

Directions (11-15): Read the following information carefully and answer the questions given below:

There are six cars – A, B, C, D, E, F – parked in a row facing north direction, but not necessarily in the same order. The distances between two adjacent cars are successive multiples of three (i.e., if the distance between the 1st and the 2nd car is 3 m, 1st and the 3rd cars is 6 m and between 1st and 4th cars is 9 m and so on.)
Information regarding all the cars:

- The distance between 'A' and 'B' is 33 m and car 'A' is to the immediate left of car 'B'.
- The distance between the cars 'E' and 'F' is 99 m. the distance between 'E' and 'D' is a multiple of '2'.
- The car 'B' is 75 m away from car 'C'. Car 'D' is at one of the position to the left of car 'C'; but not to the immediate left of 'C'.
- Car 'F' starts moving towards north and after going 18 m, it turns right, then it moves 63 m and then it goes another 7 m to its right turn and stops at point 'Z'
- Car 'C' moves 33 m towards south direction, and then takes a right turn and goes 75 m straight. Then it turns again to its right direction and moves another 17 m and halts at point 'X'.
- An another car 'M' is parked at 13 m to the west of point 'Z', Now 'M' starts moving towards further west and covers 77 m and reached point 'Y'.

11. How many cars are parked there in between cars 'D' and 'F'?
(a) Two
(b) None
(c) More than three
(d) One
(e) Three

12. What is the distance between point 'Z' and point 'X'?
(a) 25 m
(b) 18 m
(c) They don't align in the same straight line
(d) 32 m
(e) 27 m

13. What is the distance and direction of current position of Car 'M' with respect to the Car 'F'?
(a) $5\sqrt{34}$ m towards north-west
(b) 50 m towards south-east
(c) $10\sqrt{17}$ m towards north-east
(d) $5\sqrt{34}$ m towards south-east
(e) None of these

14. Which car will be met first, if 'M' moves through the shortest distance from point 'Y'?
(a) E (b) F (c) C
(d) D (e) None of these

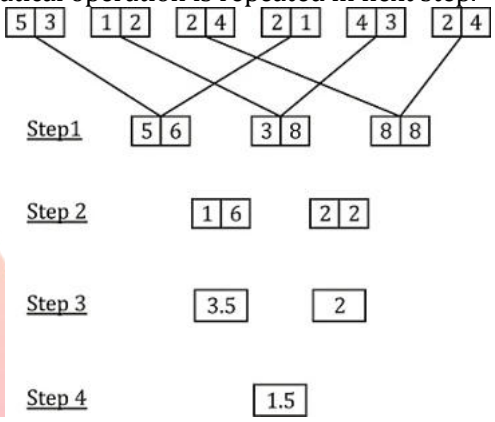
15. What is the position of car 'A' with respect to car 'E'?
(a) 75 m towards right
(b) To the immediate right
(c) 36 m towards left
(d) 69 m towards left
(e) None of the above

16. The mushrooming of business schools in the country is a cause for shortage of faculty with Ph.D qualification. In addition, the higher pay and generous fringe benefits given by industry has encouraged qualified people to not seek academic positions.
Which of the following statements, if true, would tend to STRENGTHEN the argument?
(a) The average salary for industry positions in Gujarat is more than the average salary for faculty positions in some business schools in Ahmedabad by around 30%
(b) The average salary for industry positions in Gujarat is less than the average salary for faculty positions in a top business school in Ahmedabad by around 30%
(c) The average salary for recent Ph.D graduates in the industry is 20% higher than that in industry.
(d) The rate of growth of salaries for the industry positions is equal to the rate of growth of salaries for academic positions for the past three years
(e) None of the above

17. The Government has appealed to all citizens to use potable water judiciously as there is an acute shortage in supply. Excessive use may lead to huge scarcity in future months.
Which of the assumptions is implicit in the above statement?
An assumption is something supposed or taken for granted)
(a) People may ignore the appeal and continue using water as per their consideration
(b) Government may be able to tap those who do not respond to the appeal
(c) Government may be able to put in place alternate sources of water in the event of a crisis situation
(d) Large number of people may positively respond to the Government's appeal and help tide over the crisis
(e) Only poor are going to suffer from this shortage of water supply.

Directions (18-20): Study the given information carefully and answer the given questions.

An input-output is given in different steps. Some mathematical operations are done in each step. No mathematical operation is repeated in next step.



As per the rules followed in the steps given above, find out in each of the following questions the appropriate step for the given input.

4 2 | 5 1 | 2 9 | 3 2 | 7 1 | 1 4

18. Find the addition of the two numbers obtained in step III?
(a) 1.5 (b) 3 (c) 7
(d) 3.5 (e) None of these

19. Find the difference between sum of numbers which obtained in 1st step and sum of numbers obtained in all other steps?
(a) 232 (b) 185 (c) 188
(d) 183.5 (e) None of these

20. Find the multiplication of the numbers obtained in step II?
(a) 426 (b) 462 (c) 188
(d) 98 (e) None of these

21. Statement: Science is a sort of news agency comparable in principle to other news agencies. But this news agency gives us information which is reliable to an extraordinary high degree due to elaborate techniques of verification and its capacity to survive centuries. So, science should be read with as much interest as we read news.

Assumptions:
I. Science encourages investigative spirit.
II. People read news out of interest.
(a) If only assumption I is implicit
(b) If only assumption II is implicit
(c) If either I or II is implicit
(d) If neither I nor II is implicit
(e) Both I and II are implicit

Directions (22-23): In each of the following questions, a question is followed by three statements numbered I, II and III. Read all the statements to find the answer to given question and then answer accordingly that which statement/s can give the answer alone/together.

22. What is the direction of point U with respect to point X?
Statement I: Point R is 7 m to the North of point Q. Point P is 8 m to the West of point Q. Point R is 6 m to the West of point U.
Statement II: Point B is 9 m to the North of point A. Point P is 5 m to the North of point Z. Point Z is 4 m to the West of point A.
Statement III: Point C is 7 m to the East of point A. Point X is 2 m to the East of point F. Point F is 3 m to the North of point C.
(a) Both I and III
(b) Both II and III
(c) All I, II and III
(d) II and either I or III
(e) Even I, II and III together are also not sufficient

23. What does the code 'bp' stand for in the given code language?
Statement I: In the language, 'black white red' is coded as 'df dc or' and 'green blue grey' is coded as 'st hn wo'
Statement II: In the language, 'blue pink brown' is coded as 'er bp hn' and 'pink blue white' is coded as 'hn or bp'
Statement III: In the language, 'green violet orange' is coded as 'pa wo kl' and 'yellow pink brown' is coded as 'bp bi er'
(a) Both II and III
(b) I and either II or III
(c) II and either I or III
(d) Both I and III
(e) All I, II and III

24. A very large number of technically qualified young Indians are coming out of colleges every year though there are not enough opportunities for them to get gainful employment.
Which of the following contradicts the views expressed in the above statements?
(a) Technically qualified persons are superior to those having standard degrees like BA/BSc/BCom etc.
(b) The Government has not done effective perspective planning for engaging technically qualified personnel while authorizing the setting up of technical colleges.
(c) Opportunities are available but All huge gap exists between the level of competence of technically qualified graduates and requirements of the industry.
(d) Majority of the technically qualified persons are migrating from India to developed countries for better opportunities.
(e) None of the above

Directions (25-26): Study the information carefully and answer the questions given below.

There are two square fields of different size such that the larger one is surrounding smaller field. Four gates are there for each field in the middle of the sides. Eight people A, B, C, D, E, F, G and H are standing at different gates but not necessary in the same sequence. The persons who are on the sides of larger park facing center and The persons who are at side of smaller park facing outside such that inner sides persons and outer sides persons are facing each other. There is one person standing between B and D. C faces B. A is to the immediate right of C. G is not the immediate neighbor of D. G faces neither D nor F. One person is standing between H and F. E is facing the center

25. Which of the following persons are facing to each other?
(a) BD (b) EB (c) FH
(d) DE (e) AH

26. Four of the following five are alike in a certain way based from a group which one of the following does not belong to that group?
(a) EF (b) CH (c) DA
(d) FC (e) BH

Directions (27-28): Study the information carefully and answer the questions given below.

P is the husband of Q. R is the grandchild of P.P has only one child(son) who is married to T's child. T has only two children one son and one daughter. X is grandson of T. S is brother in law of son of T. U and V are children of T. W is married to the son of T. X is son of U's brother.

27. If T is married to Y than how is T related to R?
(a) Grandfather
(b) Grandmother
(c) Maternal Grandfather
(d) Maternal Grandmother
(e) Either (c) or (d)

28. How is X related to V?
(a) Son (b) Daughter
(c) Son in law (d) Daughter in law
(e) Husband

Directions (29-30): In each question below are given a statement followed by two courses of action numbered I and II. You have to assume everything in the statement to be true and on the basis of the information given in the statement, decide which of the suggested courses of action logically follow(s) for pursuing.
Give answer
(a) If only I follows;
(b) If only II follows,
(c) If either I or II follows;
(d) If neither I nor II follows and
(e) If both I and II follow.

29. **Statement**: Every year, at the beginning or at the end of the monsoons, we have some cases of conjunctivitis, but this year, it seems to be a major epidemic, witnessed after nearly four years.
Courses of action:
I. Precautionary measures should be taken after every four years to check this epidemic.
II. People should be advised to wash their eyes with clean water.

30. **Statement:** Researchers are feeling agitated as libraries are not equipped to provide the right information to the right users at the right time in the required format. Even the users are not aware about the various services available for them.
Courses of action:
I. All the information available to the libraries should be computerized to provide faster services to the users.
II. Library staff should be trained in computer operations.

Direction (31-35): Study the following information carefully and answer the questions given below:

Ten lecturers P, Q, R, S, T, U, V, W, X and Y teach in the same college. They give lectures in five months (April, May, June, September and December). They give lectures in each month on 7th and 21st date. Only two lectures held in a month. The lectures are attended by different number of students. The total strength of students is 100 in each class and 50% attendance is compulsory for each class. The number of students will be even in the month of 30 days and odd in the month of 31 days. Only one lecturer give lecture on one date of a month. Different number of students attends class on different days. No lecturer can give the lecture after W. U gives lecture in the month which has 30 days. T and Q give lectures after U on the 7th of different months respectively. Number of students who attend class on 7th September is a whole square (two digit number). R does not give the lecture in the month in which Y and Q gives lecture. The sum of number of students who attend class on the 7th of two month is 152. Only three lecturers give lecture between U and the lecturer whose class is attended by 68 students. The difference of number of students who attend class on 7th September and the sum of number of students who attend class on May, is 58. Q gives lecture in the month which has 30 days. The average of number of students who attend class on 21st April and 21st June is 76.P gives lecture in the month which has 31 days. T gives lecture in one of the day before Q. Total 55 students attend V's lecture. V does not give lecture in the month in which W gives. There are four persons who give lectures between V and S. Y gives lecture in the month which is after the month in which V gives lecture. The total number of students who attend class in five months is 714.The sum of number of students who attend class on 7th may and 7th June is 147. Students who attend class on 7th June is less than 90. The difference of the number of students who attend class of lecturer Y and R is 4.X gives lecture after P and the number of students who attend his lecture is greater than 70 and less than 80 and is not divisible by 4. The number of students who attend class on 7th December is multiple of 11. The number of students who attend the lecture of W is greater than 60 but less than 70.

31. Who among the following lecturer gives lecture on 21st June?
(a) T (b) P (c) Y
(d) V (e) None of these

32. Which among the following is the number of students who attend class on 7th December?
(a) 67 (b) 80 (c) 68
(d) 77 (e) 55

33. How many lecturers give lectures between P and Q?
(a) Three (b) Two (c) Four
(d) One (e) None

34. Who among the following gives lecture which is attended by 80 students?
(a) S (b) T (c) R
(d) U (e) None of these

35. Four of the following five are alike in a certain way and hence they form a group. Which one of the following does not belong to that group?
(a) R (b) 67 (c) V
(d) T (e) 64

Directions (36-37): First 12 even numbers are written from top to bottom. The letters of word 'SACRED' are written in alphabetical order from top to bottom against each multiple of 4 (One letter against one number). There are 2 letters between N and S. There are as many letters between E and N as between P and D. P is not against number 14. There are 5 letters between U and T. U is above T. I is written against number 6. (No letter is repeated against any number)

36. Which is the second letter of word formed by letters against numbers 6, 12, 14, and 20?
(a) T (b) D (c) N
(d) I (e) R

37. If there are 3 alphabets in English alphabetical series between alphabets written against numbers 10 and 22. Then how many alphabets in English alphabetical series are there between the alphabets written against numbers 18 and 22?
(a) Three (b) Five (c) One
(d) Four (e) Cannot be determined

38. The rate of violent crime in this state is increased up to 30% from last year. The fault lies entirely in our system of justice. Recently our judge's sentences have been so lenient that criminals can now do almost anything without fear of a long prison term.
The argument above would be weakened if it were true that
(a) 85% of the other States in the nation have lower crime rates than does this state
(b) White-collar crime in this state has also increased by over 25% in the last year
(c) 35% of the police in this state have been laid off in the last year due to budget cuts
(d) Polls show that 65% of the population in this state opposes capital punishment
(e) None of the above

Directions (39-43): Study the following information carefully and answers the questions given below.

There are 10 shelves numbered 1, 2…..10. They are arranged in two rows one above the other. The shelves 1, 2…….5 are in row 1 and rest in row 2 which is above row 1. The shelves are arranged in increasing order of number given to them. Like the shelf number 1 is placed on extreme left of row 1, then shelf number 2 and so on. Similarly the shelf number 6 is placed on extreme left of row 2, and so on. Each shelf contains a certain number of glass slabs and photo frames. There is at least one glass slab in each shelf. The length of each glass slab is 15 cm and that of each photo frame is 6 cm.

The shelf 3 has length 33 cm. There is one shelf between shelf 3 and yellow shelf. The yellow shelf contains 1 glass slab and 6 photo frames more than that in shelf 3. The silver shelf is just above the yellow shelf. The silver shelf contains same number of glass slabs as yellow shelf and 1 photo frame. There are 2 shelves between silver and green slabs. The length of green shelf is 3 cm greater than the silver shelf. The blue shelf is immediate next in number to green shelf. The blue shelf contains 1 glass slab more than that in silver shelf and 1 photo frame less than that in green shelf. There is one shelf between blue and orange shelves. The white shelf is just below the orange shelf. There is one shelf between white and red shelf. Black shelf is in row 2. The pink shelf is just below the black shelf. The black shelf has same number of photo frames and glass slabs. The orange shelf has 1 glass slab more than black shelf. The length of orange shelf is 24 cm more than the length of pink shelf. The length of violet shelf is half the length of yellow shelf. The red shelf has greater than or equal to four glass slabs. The length of pink shelf is 6 cm less than the shelf immediate next in number. The length of row 1 is 267 cm and that of row 2 is 249 cm. Blue shelf is not next to Black shelf.

39. How many more photo frames can the row 2 adjust?
(a) 1 (b) 2 (c) 3
(d) None (e) 4

40. The color of shelf 2 is?
(a) Cannot be determined
(b) Violet
(c) Red
(d) White
(e) Pink

41. How many total glass slabs do the silver, black and red shelves contain?
(a) 7
(b) 9
(c) 10
(d) Other than those given in options
(e) 12

42. What is the total length of the pink, orange and blue shelves?
(a) 146 cm (b) 134 cm (c) 141 cm
(d) 133 cm (e) 126 cm

43. If all the photo frames of silver and white shelves are removed and added in black shelf then what will be the total length of black shelf now?
(a) 67 cm (b) 66 cm (c) 61 cm
(d) 69 cm (e) 62 cm

44. During the SARS days, about 23,500 doctors who had treated SARS sufferers died and about 23,670 doctors who had not engaged in treatment for SARS sufferers died. On the basis of those figures, it can be concluded that it was not much more figures, it can be concluded that it was not much more dangerous to participate in SARS treatment during the SARS day than it was not to participate in SARS treatment.
Which of the following would reveal most clearly the absurdity of the conclusion drawn above?
(a) Counting deaths among doctors who had participated in SARS treatment in addition to deaths among doctors who had not participated is SARS treatment
(b) Expressing the difference between the numbers of deaths among doctors who had treated SARS sufferers and doctors who had not treated SARS suffers as a percentage of the total number of deaths

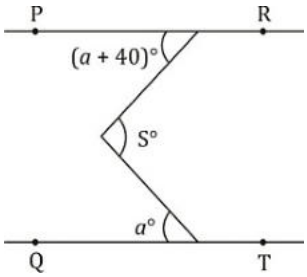
(c) Separating deaths caused by accidents during the treatment to SARS suffers from deaths caused by infect of SARS suffers
(d) Comparing death rates per thousand members of each group rather than comparing total numbers of deaths
(e) None of the above

45. Study the following information carefully and answer the questions given below.
Following are the conditions for selecting Marketing Manager in an organization. The Candidate must-
(i) Be a Graduate in any discipline with at least 55% marks.
(ii) Have secured at least 40% marks in the selection interview.
(iii) Have post qualification work experience of at least five years in the Marketing division of an organization.
(iv) Have secured at least 45% marks in the selection examination.
(v) Have a post Graduate degree/diploma in Marketing-Management with at least 60% marks.
Study the following information carefully and find which of the following condition shows candidate is not selected?
(a) Candidate is daughter of a renowned freedom fighter from another state.
(b) Candidate has a post Graduate degree in Finance with 60% marks.
(c) Candidate has completed his graduation with 80% marks.
(d) Candidate does not own a house in Noida.
(e) Candidate has secured 56% marks in Cap Gemini's interview.

QUANTITATIVE APTITUDE

46. **Quantity I:** Number of ways of arranging 5 men and 5 women such that no two men or women are adjacent to each other.
Quantity II: Number of ways of arranging 5 men and 5 women such that all men sit together.
(a) Quantity I > Quantity II
(b) Quantity I < Quantity II
(c) Quantity I ≥ Quantity II
(d) Quantity I ≤ Quantity II
(e) Quantity I = Quantity II or No relation

47. **Quantity I:** Value of 'a' if 's' is an acute angle and PR ∥ QT.



Quantity II: 25°
(a) Quantity I > Quantity II
(b) Quantity I < Quantity II
(c) Quantity I ≥ Quantity II
(d) Quantity I ≤ Quantity II
(e) Quantity I = Quantity II or No relation

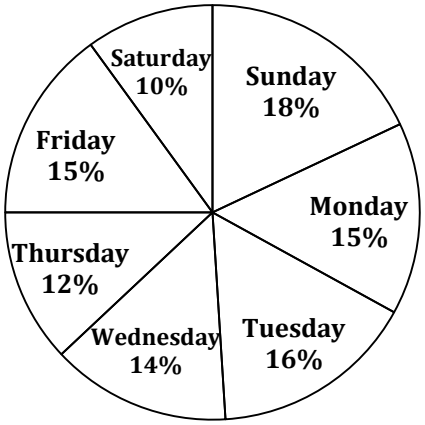
48. There are 63 cards in a box numbered from 1 to 63. Every card is numbered with only 1 number.
Quantity I: Probability of picking up a card whose digits, if interchanged, result in a number which is 36 more than the number picked up.
Quantity II: Probability of picking up a card, the number printed on which is a multiple of 8 but not that of 16.
(a) Quantity I > Quantity II
(b) Quantity I < Quantity II
(c) Quantity I ≥ Quantity II
(d) Quantity I ≤ Quantity II
(e) Quantity I = Quantity II or No relation

Directions (49): Given question consist of 3 statements A, B and C. You have to determine that which of the following statement/statements are necessary to answer the questions:

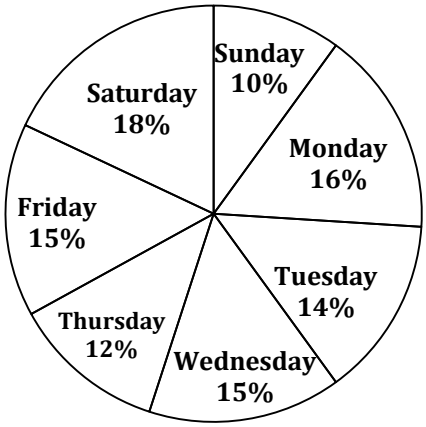
49. If m and n are integers then is n completely divisible by 10?
A. The value of $(\frac{m}{10}+\frac{n}{10})$ is an integer value.
B. The value of $(\frac{m}{7}+\frac{n}{10})$ is an integer value.
C. value of n is greater than m.
(a) Only A is sufficient
(b) Only B is sufficient
(c) Only C is sufficient
(d) Any two of them is sufficient
(e) Data is not sufficient and it requires more information to answer the given question.

Directions (50-54): Study the data given below and answer the following questions. The pie charts shows the distance covered by a boat moving upstream and downstream in seven different days of a week. And the table shows the speed of stream in km/hr. in different days of a week.

Total distance covered upstream = 1800 km



Total distance covered downstream = 1500 km



Day	Speed of stream (km/hr)
Monday	2
Tuesday	3
Wednesday	—
Thursday	1
Friday	2
Saturday	—
Sunday	4

50. If the time taken by boat to travel upstream on Thursday is equal to the time taken by it to travel downstream on Monday and the speed of boat in still water on Monday is 16 kmph then find the speed of boat in still water on Thursday?
(a) 16.2 kmph (b) 17.2 kmph (c) 15.4 kmph
(d) 12.5 kmph (e) 18.2kmph

51. If the time taken by boat to travel upstream on Monday is $\frac{45}{11}$ hrs. more than the time taken by it to travel downstream on the same day, then find the speed of boat in still water on Monday ?
(a) 22 kmph (b) 18 kmph (c) 20 kmph
(d) 19 kmph (e) 24 kmph

52. If the speed of boat in still water on Tuesday was 15 km/hr and the speed of boat in still water on Wednesday was $66\frac{2}{3}$% more than that of Tuesday and time taken to travel upstream on Wednesday is $\frac{9}{10}$ times the time taken by it to travel downstream on Tuesday, then find the speed of stream (in kmph) on Wednesday?
(a) 1.5 (b) 2.5 (c) 2
(d) 1 (e) 0.5km/hr

53. The speed of boat in still water on Saturday was 21 km/hr. and that on Sunday was $28\frac{4}{7}$% less than that on Saturday, if the time taken by boat to travel upstream on Saturday is $1\frac{3}{16}$ times the time taken to travel downstream on Sunday, then find the time taken by the boat to cover a distance of 57.6 km upstream when the speed of stream is same as that of Saturday.
(a) 3 hrs. (b) 2 hrs. (c) 4 hrs.
(d) 2.5 hrs. (e) 3.5 hrs

54. If the time taken by boat to travel upstream on Sunday is 2 hours more than the time taken by it to travel downstream on Thursday and the speed of boat in still water on Thursday is 17 kmph, then find the upstream speed of boat on Sunday ?
(a) 27 kmph (b) 22 kmph (c) 20 kmph
(d) 25 kmph (e) 23 kmph

Direction (55-57)- There are three bags A, B and C. In each bag there are three types of colored balls Yellow, Green and Black.

In bag A, no. of yellow colored balls are y and no. of green colored balls are g. Number of green colored balls are 4 more than the number of yellow colored balls. When one ball is picked at random then the probability of getting black color ball is $\frac{5}{13}$. The value of y is $18\frac{2}{11}$% less then g.

In bag B, number of yellow colored balls is $22\frac{2}{9}$% more than that of bag A. If two balls are picked at random from bag B then the probability of getting both green color ball is $\frac{4}{37}$. Total number of balls in bag B is 75.

In bag C, the ratio of number of green colored balls and number of black colored balls is 7 : 5. Total number of green and black colored balls is 36. If one ball is picked at random then the probability of getting one yellow ball is $\frac{7}{13}$.

55. If x number of yellow balls from bag B are taken and placed into bag A and 20% of black balls from bag A are taken and placed into bag B. If we pick one ball from bag B then the probability that the ball is of black color is $\frac{11}{26}$. Then find the value of x?
(a) 5 (b) 6 (c) 3
(d) 2 (e) None of these

56. If one ball picked at random from each of the bag A and bag B then find the probability that both of the balls are of the same color?
(a) $\frac{21\times47}{65\times75}$ (b) $\frac{22\times43}{65\times75}$ (c) $\frac{11\times17}{65\times75}$
(d) Can't be determined
(e) None of these

57. Difference between the number of green balls in bag A and bag C is how much percent more/less than the sum of the number of black balls in bag A and bag C together?
(a) 100% (b) 95% (c) 97.5%
(d) 102.5% (e) None of these

Directions (58-62): There are five shop owners A, B, C, D and E. They are selling five different items given in the table.

In the table, Discount (as percentage) is given on mark price of these five items by different sellers. Study the table and answer the following questions:

	Item I	Item II	Item III	Item IV
A	18%	32%	36%	—
B	22%	—	33%	40%
C	—	16%	14%	15%
D	28%	28%	16%	—
E	—	8%	—	7%

Note:
1. Some values are missing. You have to calculate these values as per data given in the questions.
2. Mark price of a particular item is same for all five shop owners.

58. If the profit percentage of seller A after selling item II is s% and that of seller C for the same item is (2s - 4)% and the ratio of cost price of item II by seller A and seller C is 17 : 21 then find the value of s ?
(a) 2 (b) 3 (c) 4
(d) 5 (e) 2

59. For seller D, difference between the selling price of item II and that of item III is 420 Rs. if the sum of the mark price of item II and item III by the same seller is 6000 then the Mark price (in Rs.) of item II is what percent more/less than that of item III by the same seller ? (Selling price of item II is greater than that of item III)
(a) 50% (b) 40% (c) 30%
(d) 35% (e) 45%

60. Average SP of item II of seller A and B is Rs 3888 and that of seller B and C is Rs 4320. Find the SP (in Rs.) of item III of seller C.
(a) 4536 (b) 3656 (c) 5430
(d) 4150 (e) None of these

61. If the selling price of item I and item III of seller E are in the ratio of 5 : 6. And the seller earned a profit of 25% which is Rs. 750 on item I and 20% on item III then find the total profit (in Rs.) by selling item I and item III together by the same seller ?
(a) 750 (b) 2000 (c) 1750
(d) 1250 (e) 1500

62. Cost price of item III is 60 Rs. for all of the sellers and all of them marked the same product at $66\frac{2}{3}$% higher than the cost price, then to get a total profit of 80 Rs. by all of the five sellers after selling item III, what is the minimum discount should be provided by seller E on marked price of item III
(a) 21% (b) 19% (c) 17%
(d) 25% (e) 27%

Directions (63-64): A, B and C invested 900 Rs., 1600 Rs. and 700 Rs. respectively in a business venture. After end of the first quarter they invested additional amount in the ratio of 2 : 5 : 3. Then after end of the second quarter A, B and C invested additional amount in the ratio of 4 : 3 : 4.

Again after end of the 3rd quarter they invested additional amount in the ratio of 7 : 6 : 7.

They invested the whole amount for one year and the profit earned in the business is proportional to the investment and the period of investment

63. If they had invested additional amount at the end of each quarter as same ratio as they had invested after end of the first quarter then find the profit of B at the end of one year if the total profit at the end of the year is 125000
(a) 75000 Rs. (b) 62500 Rs. (c) 125000 Rs.
(d) 37500 Rs. (e) 65000 Rs.

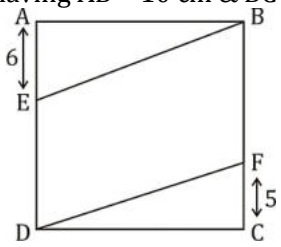
64. If the sum of the total amount invested by A and B in the year is 9000 Rs. and that of B and C is 10500 Rs. then find the total amount invested by all of them for only 2nd quarter ?
(a) 16500 Rs. (b) 17000 Rs. (c) 17500 Rs.
(d) 18500 Rs. (e) 18000 Rs.

Directions (65-66): Train A and train B are travelling towards each other from stations P and Q. Train A left station P at 9 : 45 am with a speed of 54 kmph. After half an hour train B left station Q with a speed of 66 kmph. Stations P & Q are situated at a distance of x kms and both trains met each other at 2 : 35 pm the same day.

65. Calculate the difference in the original time taken as given above in condition to meet train A and B and the time taken by train B to catch train A if the train A had started in same direction as that of B. Train B had started 2 hrs after train A while going in same direction.
(a) 45 hrs. 40 min.
(b) 24 hrs. 20 min.
(c) 55 hrs. 30 min.
(d) 49 hrs. 45 min.
(e) 48 hrs. 45 min.

66. What is the ratio of relative speed of both the trains while travelling towards the same direction and while travelling towards opposite direction ?
(a) 10 : 1 (b) 9 : 2 (c) 1 : 10
(d) 10 : 3 (e) 1:12

67. **Quantity I:** Area of quadrilateral BFDE, given ABCD is a rectangle having AB = 10 cm & BC = 12 cm.



Quantity II: 15 cm²
(a) Quantity I > Quantity II
(b) Quantity I < Quantity II
(c) Quantity I ≥ Quantity II
(d) Quantity I ≤ Quantity II
(e) Quantity I = Quantity II or No relation

68. A, B and C entered into a partnership. A invested Rs. 3000 at the start. B invested $33\frac{1}{3}$% more than that invested by A and C invested the average of the investment made by A and B. After 4 months, A withdrew 40% of his amount, B doubled his amount and C increased his amount by 20%. After another 5 months, B got away from partnership and A doubled his amount while C maintained his amount. Profit at the end of year was Rs. 677000 and profit was shared in the ratio of their investment and time.
Quantity I: Profit earned by C.
Quantity II: Average of profit earned by A, B and C together.
(a) Quantity I > Quantity II
(b) Quantity I < Quantity II
(c) Quantity I ≥ Quantity II
(d) Quantity I ≤ Quantity II
(e) Quantity I = Quantity II or No relation

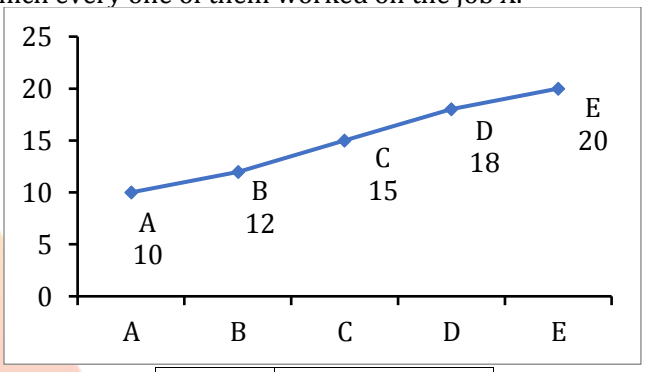
Directions (69-70): Each of A, B, C and D need a unique time to do a certain work. A can do the work in x days and B can do the work in 2x days. A started the work and do it for $22\frac{2}{9}$ days then he is replaced by B, who completed remaining work in same time as C and D together can complete the whole work.

The ratio of the efficiency of C and D is 4 : 5. If C and D work for alternative days starting from C then they can do the total work in $44\frac{1}{2}$ days.

69. Find the value of x
(a) $66\frac{2}{3}$ (b) $33\frac{1}{3}$ (c) $16\frac{2}{3}$
(d) $14\frac{2}{7}$ (e) $37\frac{1}{2}$

70. If E and F together work for 24 days then they are replaced by A and B respectively then they can do the remaining work in 20 days. If the efficiency of E and F is 5 : 4, If E and F together complete the whole work then find the difference between the work done by E alone and the total work done by F alone ?
(a) $\frac{1}{9}$ (b) $\frac{1}{7}$ (c) $\frac{2}{7}$
(d) $\frac{1}{3}$ (e) $\frac{3}{4}$

Directions (71-75): A, B, C, D and E are five persons employed to complete a job X. Line graph shows the data regarding the time taken by these five persons to complete the job X individually. Table shows the actual time for which every one of them worked on the job X.



Person	Time (in Days)
A	2
B	–
C	3
D	–
E	2

Note 1: All the persons worked on the job X for 'whole number' days.
Note 2: Two jobs Y and Z are similar to job X and require same effort as required by job X.

71. A and C worked on job Y working alternatively for 10 days. B and D then worked together for 'x' days. If $\frac{1}{36}$ of the job was still remained, then find the value of 'x'?
(a) 2 days (b) $1\frac{1}{4}$ days (c) $1\frac{1}{3}$ days
(d) $1\frac{1}{7}$ days (e) 1 day

72. E worked on job 'Z' for 5 days and the remaining job was completed by A, B and D who worked on alternate days starting with A followed by B and D in that order. Find the no. of days B worked for ?
(a) 2 (b) 4 (c) 9
(d) 3 (e) 5

73. If A, C and E worked on job Z for 2 days each and the remaining job was done by B and D. If the ratio of no. days for which B and D worked is in ratio 20 : 21, then find the number of days for which B worked ?
(a) 50 days (b) $4\frac{1}{2}$ days (c) $5\frac{1}{2}$ days
(d) 4 days (e) None of these

74. If the ratio of number of days for which B and D worked on job X in the ratio of 4 : 3, then find the difference between number of days for which B and D worked ?

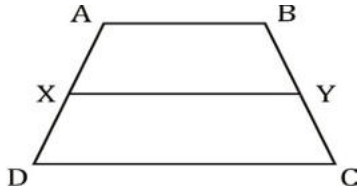
(a) 2 (b) 3 (c) 1
(d) 4 (e) 5

75. If C worked on job Y with $\frac{5}{4}$ times his given efficiency and was assisted by B every 3rd day, then find the time taken by C to complete the job Y?

(a) 13 days (b) $12\frac{1}{6}$ days (c) $13\frac{1}{2}$ days
(d) 9 days (e) 12 days

76. ABCD is a trapezoid. PQRS and MLKJ are two rhombus. Diagonal of PQRS are 6 cm and 8 cm. One of the angle of MLKJ is 120 degree and the diagonal bisecting that angle measures 15 cm. Side of PQRS = AB, side of MLKJ = CD.

Find XY (median of trapezoid)



(a) 5 cm (b) 10 cm (c) 15 cm
(d) 20 cm (e) None of these

77. A vessel contains 2.5 liters of water and 10 liters of milk 20% of the contents of the vessel are removed. To the remaining contents, x liters of water is added to reverse the ratio of water and milk. Then y liter of milk is added again to reverse the ratio of water and milk. Find y.

(a) 100 (b) 110 (c) 120
(d) 130 (e) 150

Directions (78-80): Each of the following questions consist of 3 statements A,B and C. You have to determine that which of the following statement/statements are necessary to answer the questions:

78. A, B and C entered into a partnership. If the profit earned in the business is proportional to the investment and the period of investment then What is the profit of B if all of them invested the amount for one year and total profit is Rs. x.

A. A invested Rs. 1500 more than that of C.
B. A invested 2 times more than that of B. C invested 3 times more than that of A.
C. B invested 200 percent more than that of A and 100% less than that of C.

(a) Any two of them
(b) Either B or C alone
(c) Any of them
(d) All statements are required
(e) None of these

79. 6 men and 9 women and 5 children can do a work in 14 days. In how many days can 12 men and 3 women and 5 children do the same work?

A. 20 men and 30 women can do the same work in 5 days.
B. Work done by 2 men is equal to 3 women.
C. 6 children can do two-thirds of the same work in 28 days.

(a) Any one of them
(b) Only C
(c) C and either A or B
(d) Any two of them
(e) Only either A or B

80. Rajnish buys 30 books and 65 pens. If price of each book is more than price of each pen then what money does he have to pay for this?

A. At a profit of 20% he sells all the objects for Rs 3828.
B. The CP of one book and one pen is Rs 90.
C. The difference between sum and difference of buying price of one pen and one book is Rs 28.

(a) Only A alone or B alone is sufficient
(b) B and C together are sufficient
(c) A alone or B and C together are sufficient
(d) All together are necessary
(e) All even together are not sufficient

ENGLISH LANGUAGE

Directions (81-85): Read the following passage divided into number of paragraphs carefully and answer the questions that follow it.

Paragraph 1: At a global financial services firm we worked with, a longtime customer accidentally submitted the same application file to two offices. Though the employees who reviewed the file were supposed to follow the same guidelines—and thus arrive at similar outcomes—the separate offices returned very different quotes. Taken aback, the customer gave the business to a competitor. From the point of view of the firm, employees in the same role should have been interchangeable, but in this case they were not. **Unfortunately, this is a common problem**.

Paragraph 2: Professionals in many organizations are assigned arbitrarily to cases: appraisers in credit-rating agencies, physicians in emergency rooms, underwriters of loans and insurance, and others. Organizations expect consistency from these professionals: Identical cases should be treated similarly, if not identically. The problem is that humans are unreliable decision makers; their judgments are strongly influenced by irrelevant factors, such as their current mood, the time since their last meal, and the weather. We call the chance variability of judgments **noise**. It is an invisible tax on the bottom line of many companies.

Paragraph 3: Some jobs are noise-free. Clerks at a bank or a post office perform complex tasks, but they must follow strict rules that limit subjective judgment and guarantee, by design, that identical cases will be treated identically. In contrast, medical professionals, loan officers, project managers, judges, and executives all make judgment calls, which are guided by informal experience and general principles rather than by rigid rules. And if they don't reach precisely the same answer that every other person in their role would, that's acceptable; this is what we mean when we say that a decision is "a matter of judgment." A firm whose employees exercise judgment does not expect decisions to be entirely free of noise. But often noise is far above the level that executives would consider tolerable—and they are completely unaware of it.

Paragraph 4: The prevalence of noise has been demonstrated in several studies. Academic researchers have repeatedly confirmed that professionals often contradict their own prior judgments when given the same data on different occasions. For instance, when software developers were asked on two separate days to estimate the completion time for a given task, the hours they projected differed by 71%, on average. When pathologists made two assessments of the severity of biopsy results, the correlation between their ratings was only .61 (out of a perfect 1.0), indicating that they made inconsistent diagnoses quite frequently. Judgments made by different people are even more likely to diverge. Research has confirmed that in many tasks, experts' decisions are highly variable: valuing stocks, appraising real estate, sentencing criminals, evaluating job performance, auditing financial statements, and more. The unavoidable conclusion is that professionals often make decisions that deviate significantly from those of their peers, from their own prior decisions, and from rules that they themselves claim to follow.

Paragraph 5: Noise is often insidious: It causes even successful companies to lose substantial amounts of money without realizing it. How substantial? To get an estimate, we asked executives in one of the organizations we studied the following: "Suppose the optimal assessment of a case is $100,000. What would be the cost to the organization if the professional in charge of the case assessed a value of $115,000? What would be the cost of assessing it at $85,000?" The cost estimates were high. Aggregated over the assessments made every year, the cost of noise was measured in billions—an unacceptable number even for a large global firm. The value of reducing noise even by a few percentage points would be in the tens of millions. Remarkably, the organization had completely ignored the question of consistency until then.

81. What is the opposite of the phrase "**Unfortunately, this is a common problem**" as mentioned in the Paragraph 1?

(a) Employees often constitute variable decision-making capability even if they are assigned the same task to perform.

(b) Even though employees are expected to come out with fair, positive and noise-free results, organizations find it almost an opposite and contradictory outcome to it.

(c) A major problem is that the outcomes of decisions taken by different employees in the organization often aren't known until far in the future, if at all.

(d) Employees have to follow the strict norms and rules of the organization which often allow them to take rationale and conventional decisions in the best interest of the organization which hardly go unnoticed.

(e) None of the above.

82. What does the author mean by the term "**noise**" as used in Paragraph 2?
(I) In an organization where work efficiency decides the potential of its employees, employees find it difficult to cope with their decisions and most of the time they land up in variable outcome to their motive which is termed as Noise.
(II) Noise is a problem which is effectively invisible in the business world; it can be observed that audiences get quite surprised when the reliability of professional judgment is mentioned as an issue.
(III) Noise is a problem associated with the decision-making process of the employees involved in the corporate world which is invisible as people do not go through life imagining plausible alternatives to every judgment they make.
(a) Only (I) is correct
(b) Only (III) is correct
(c) Both (II) and (III) are correct
(d) Both (I) and (III) are correct
(e) All are correct

83. Why according to the author decision is considered as "a matter of judgment" as mentioned in Paragraph 3?
(I) In most of the cases, decisions are guided by informal experience and general principles rather than by rigid rules.
(II) In certain cases, medical professionals, judges and executives have to take decisions which are beyond the strict rules that control the instinctive judgment which might not be noise-free, yet acceptable to the system.
(III) Long experience on a job always increases people's confidence in their judgments, but in the absence of rapid feedback, confidence is no guarantee of either accuracy or consensus.
(a) Only (I) is correct
(b) Only (III) is correct
(c) Both (I) and (III) are correct
(d) Both (I) and (II) are correct
(e) All are correct

84. Which of the following statements can follow paragraph 4 to form a connection with paragraph 5?
(a) The surprising result of much research is that in many contexts reasoned rules are about as accurate as statistical models built with outcome data.
(b) Uncomfortable as people may be with the idea, studies have shown that while humans can provide useful input to formulas, algorithms do better in the role of final decision maker.
(c) Executives who are concerned with accuracy should also confront the prevalence of inconsistency in professional judgments.
(d) Controlling noise is hard, but we expect that an organization that conducts an audit and evaluates the cost of noise in dollars will conclude that reducing random variability is worth the effort.
(e) The major puzzle for us was the fact that neither organization had ever considered reliability to be an issue.

85. What is/are the author's viewpoint(s) in accordance with Paragraph 5?
(I) The author is skeptical about the credibility of the research works on the measurement of cost of noise.
(II) The author is critical about the consequences of the problem of noise as it leads organizations to lose substantial amounts of money that often go unrealized.
(III) The author feels that the problem of noise is severe enough to require action.
(a) Only (I)
(b) Only (II)
(c) Both (I) and (III)
(d) Both (II) and (III)
(e) All (I), (II) and (III)

Directions (86-90): Read the following passage divided into number of paragraphs carefully and answer the questions that follow it.

Paragraph 1: **Deutsche is more leveraged than its peers**; it is unusual in lacking a crown jewel around which it can base a business model; and it has a stack of derivatives whose prices are hard to observe in the market. More positively, it is light on the non-performing loans that clog the balance-sheets of banks in places like Italy. But in other ways its problems have a very familiar ring. Deutsche is struggling to make a decent return. It has taken too long to face up to its problems. And the market it operates in is overbanked. Years after American banks were forced to clean themselves up, too many European lenders are still flailing as a result.

Paragraph 2: Europeans prefer to blame others for the turmoil. Deutsche has lashed out at "forces in the market" for its most recent bout of trouble. But its shares had already fallen by 42% this year before news broke last month of a proposed Department of Justice (DoJ) fine of $14 billion for mortgage-related misdeeds. German politicians insinuate that the mooted fine represents revenge for Europe's recent tax case against Apple, an American champion. Yet the DoJ has slapped large fines on American banks, too. **Deutsche's vulnerability to shocks is the problem, not the shocks themselves**.

Paragraph 3: Fingers also point at global regulators. The boss of Credit Suisse, Tidjane Thiam, says his sector is "not really investible". It is true that the rules have got much stricter in the past few years, particularly for institutions,

like Deutsche, that have big investment-banking arms. It is also true that ultra-loose monetary policy, and in particular the negative interest rates that now prevail in much of Europe, eat away at banks' profitability. But some banks cope better than others in this painful environment. The IMF has compared returns on equity before and after the financial crisis. Those at large European banks fell by 11.4 percentage points, whereas those at American lenders dipped by only three points. Rather than blaming speculators, Americans and regulators, Europe's bankers and policymakers need to put their own house in order.

Paragraph 4: Within institutions, that means cutting costs and raising capital. According to S&P Global Market Intelligence, the average cost-to-income ratio at an American bank in 2015 was 59%; Italy's figure stood at 67% and Germany's at 72%. Scandinavian banks already operate with much lower costs than their peers elsewhere in Europe. The axe is now swinging: Commerzbank, another struggling German lender, and ING, a Dutch bank, have announced thousands of job cuts in the past few days.

Paragraph 5: But more can be done. Pay is one obvious lever. Deutsche's bankers trousered roughly the same amount in annual compensation between 2011 and 2015, even as the bank's share price dived. And before shareholders complain too loudly about that, recall that in 2007-15 the dividend payments by 90 euro-zone banks amounted to €223 billion ($250 billion). Their retained earnings would have been 64% higher at the end of that period if they had not paid out dividends.

86. Which of the following sentences justifies the statement, "**Deutsche is more leveraged than its peers**" as mentioned in Paragraph 1?
(I) Deutsche is scuffling to generate adequate profits to stay afloat in the market.
(II) Though the market in which Deutsche operates is overbanked, it has a mound of derivatives whose prices are hard to observe in the market.
(III) Though Deutsche has taken a longer time to face up to its problems, it is still airy on the non-performing loans that obstruct the balance-sheets of banks in places like Italy.
(a) Only (I) is correct
(b) Only (II) is correct
(c) Both (I) and (II) are correct
(d) Both (II) and (III) are correct
(e) All are correct

87. What does the author mean by the statement, "**Deutsche's vulnerability to shocks is the problem, not the shocks themselves**" as mentioned in Paragraph 2?
(a) Deutsche is more prone to consistent failures which may have indirect effects on the market in coming years.
(b) Deutsche is losing its share values inadvertently due to certain forces in the market which is surprising to German politicians.
(c) Despite performing better in certain specific fields than other banks, Deutsche is finding itself in the midst of turbulence which is itself a revelation.
(d) The arguable fine of $14 billion for mortgage-related misdeeds by Department of Justice has completely shocked the entire European bureaucrats.
(e) None of the above.

88. Which of the following statements cannot be inferred from Paragraph 3?
(a) Despite having bigger investment-banking arms, the consistent downfall of European banks is a matter of serious concern.
(b) The prevailing negative interest rates in many parts of Europe indicate that there is ultra-loose monetary policy in Europe.
(c) The IMF figures on return on equity show that American banks are performing far better than European banks in the existing critical market.
(d) European policymakers need to come out with strict and robust policies to safeguard its downgrading existence in the world market than pointing fingers on speculators and regulators.
(e) Without pruning, returns on equity of European banks are projected to fall towards zero as a result of ultra-low rates and regulation as compared to American counterpart.

89. Which of the following sentences can be connected with Paragraph 4 to make a connection with Paragraph 5?
(a) Some European markets have been clearing away excess capacity.
(b) Like Deutsche, Credit Suisse is freer to make plans after a recent settlement with American authorities over mis-selling mortgage-backed securities before the financial crisis.
(c) It expects to wind up a unit in which it has dumped unwanted assets by the end of 2018, a year ahead of schedule.
(d) European banks could have done a lot more sooner.
(e) The recapitalisation of Europe's banks has been as gradual as that of America's was swift, and in dribs and drabs of tens of billions a year rather than in one big splurge.

90. What could be the possible solutions for the rehabilitation of European banks in the existing system?
(I) Proper fiscal stimulus by European governments would cut the chances that central banks have to keep interest rates so low.

(II) Using public money to recapitalise the weakest banks in countries like Italy, and requiring them to slim down in return, is the fastest way to return them to health.
(III) Significant job cuts of their employees to compensate the losses occurred in last few years could bring everything back to normalcy.
(a) Only (I)
(b) Only (II)
(c) Both (I) and (III)
(d) Both (I) and (II)
(e) All (I), (II) and (III)

Direction (91): There are sets of four statements in question given below which when connected using the correct sentence structure forms a complete single sentence without altering the meaning of the sentences given in the question. There are four options given below the question, choose the sentence that forms the correct formation of single sentence which is both grammatically correct and contextually meaningful. If none follows, choose (e) as your answer.

91. There is a statedly contemporary twist of a 360 degree review by peers, seniors and colleagues; it is an equally hush-hush affair; it does not really pass muster as an objective assessment tool for professional capabilities; it is in spite of our unique work environment.
(a) The statedly contemporary twist of a 360 degree review by peers, seniors and colleagues, is an equally hush-hush affair and does not really pass muster as an objective assessment tool for professional capabilities, given our unique work environment.
(b) Despite our unique work environment, there is a statedly contemporary twisting of a 360 degree review by peers, seniors and colleagues which is an equally hush-hush affair but it has not really passed muster as an objective assessment tool for professional capabilities.
(c) Twisting review to 360 degree by peers, seniors and colleagues and making it an equally hush-hush affair, it does not really pass muster as an objective assessment tool for professional capabilities in our unique work environment.
(d) Although we have unique work environment, there is a statedly contemporary twist of a 360 degree review by peers, seniors and colleagues and an equally hush-hush affairs which do not pass muster as an objective assessment tool for professional capabilities.
(e) None of the above is correct.

Direction (92): The following question consists of a sentence which is divided into three parts which contain grammatical errors in one or more than one part of the sentence. If there is an error in any part of the sentence, find the correct alternatives to replace those parts from the three options given below each question to make the sentence grammatically correct. If there is an error in any part of the sentence and none of the alternatives is correct to replace that part, then choose (d) i.e. None of the (I), (II) and (III) as your answer. If the given sentence is grammatically correct or does not require any correction, choose (e) i.e. No correction required as your answer.

92. The announcement by the Saudi-led coalition to sever (I)/ diplomatic ties with Qatar marks the culmination of a year-long (II)/ dispute over few Gulf Arab states and Qatar. (III)
(I) The announcement by the Saudi-led coalition severing
(II) diplomatic tie with Qatar marked a year-long culmination
(III) dispute between some Gulf Arab states and Qatar
(a) Only (I)
(b) Only (III)
(c) Both (I) and (III)
(d) None of the (I), (II) and (III)
(e) No correction required

Direction (93): In the following question a part of the sentence is given in bold, it is then followed by three sentences which try to explain the meaning of the phrase given in bold. Choose the best set of alternatives from the five options given below each question which explains the meaning of the phrase correctly without altering the meaning of the sentence given as question.

93. The problem of secularism in independent India lies in the fact that the Constitution was essentially **a Western construct** with the sidelining of the Gandhian Influence in the Constituent Assembly.
(I) Secularism in India is highly motivated by the Western pattern of Constitution with hardly any presence of Gandhian Influence.
(II) The Constitution was basically influenced by the culture followed in Western societies and it hardly considered the Gandhian Influence in the Constituent Assembly which depicts the problem of secularism in independent India.
(III) The developmental projects of western countries had such an impact on Indian Constitution that it ignored the Gandhian Influence and today we are facing the problem of secularism in the country.
(a) Only (I) is correct
(b) Only (II) is correct
(c) Both (I) and (II) are correct
(d) Both (II) and (III) are correct
(e) All are correct

Direction (94): In question given below there are two statements, each statement consists of two blanks. You have to choose the option which provides the correct set of words that fits both the blanks in both the statements appropriately and in the same order making them meaningful and grammatically correct.

94. (1) Despite the fact that cancerous ovarian stem cells are _____ to chemoresistance, they are the _____ targets for therapy.
(2) How quickly the _____ branch of Homo heidelbergensis turned into something that could be called Homo sapiens was therefore _____.
(a) Feigned, indeterminate
(b) Pertinent, inane
(c) Relevant, obscure
(d) affiliated, fatuous
(e) analogous, insignificant

Direction (95): In each of the given questions an inference is given in bold which is then followed by three paragraphs. You have to find the paragraph(s) from where it is inferred. Choose the option with the best possible outcome as your choice.

95. The major concern is security.
(I) The major dilemma for many security professionals is whether the Brexit will make the UK more or less safe when it comes to cybersecurity. One poll found that most security professionals believed there would not be any major cybersecurity implications; however, another poll offered different conclusions, with most respondents believing that a Brexit would weaken cybersecurity because of additional bureaucratic hurdles to information sharing with the EU.
(II) Most debate over Brexit has been about economics, trade and migration. But when David Cameron called the EU referendum in February he cited a new factor, asserting that membership made Britain safer. This week the prime minister went further, hinting that Brexit might increase the risk related to security—and adding that, every time Britain turned its back on Europe, it had come to regret it.
(III) Prime Minister Shinzo Abe touted the implementation of the legislation as an event of "historic importance that makes peace and security of our country even more secure" and "upgrades our deterrence and enables the nation to proactively contribute more than ever to peace and stability of regional and international communities."
(a) Only (I)
(b) Both (II) and (III)
(c) Only (III)
(d) Both (I) and (III)
(e) All are correct

Direction (96): There are sets of four statements in question given below which when connected using the correct sentence structure forms a complete single sentence without altering the meaning of the sentences given in the question. There are four options given below the question, choose the sentence that forms the correct formation of single sentence which is both grammatically correct and contextually meaningful. If none follows, choose (e) as your answer.

96. The major thrust of Marx's political philosophy was aimed at human liberation; it is important to consider the significant shift to comprehend it; the shift occurred in the late 17th century; In that period traditional analysis of the political order based on scarcity was replaced by a philosophy of abundance.
(a) Comprehending the major thrust of Marx's political philosophy that was aimed at human liberation, it is important to consider the significant shift of late 17th century when the scarcity based on traditional analysis was replaced by a philosophy of abundance.
(b) Marx's major thrust was on political philosophy aiming human liberation while it is important to consider the significant shift that occurred in the late 17th century, it was then that traditional analysis of the political order based on scarcity was replaced by a philosophy of abundance.
(c) It is important to consider the significant shift in the late 17th century when traditional analysis of the political order based on scarcity replaced philosophy of abundance to comprehend the major thrust of Marx's political philosophy of human liberation.
(d) To comprehend the major thrust of Marx's political philosophy that aimed at human liberation, it is important to consider the significant shift that occurred in the late 17th century when traditional analysis of the political order based on scarcity was replaced by a philosophy of abundance.
(e) None of the above is correct.

Direction (97): The following question consists of a sentence which is divided into three parts which contain grammatical errors in one or more than one part of the sentence. If there is an error in any part of the sentence, find the correct alternatives to replace those parts from the three options given below each question to make the sentence grammatically correct. If there is an error in any part of the sentence and none of the alternatives is correct to replace that part, then choose (d) i.e. None of the (I), (II) and (III) as your answer. If the given sentence is grammatically correct or does not require any correction, choose (e) i.e. No correction required as your answer.

97. Italian officials have been arguing that (I)/volatility caused by Britain's vote to leave the European Union (II)/ means it could have given greater flexibility to prop up struggling banks. (III)
(I) Italians officials had argued that
(II) volatility that caused Britain's vote to leave the European Union
(III) meant it should be given greater flexibility to prop up struggling banks
(a) Only (II)
(b) Both (I) and (III)
(c) All (I), (II) and (III)
(d) None of the (I), (II) and (III)
(e) No correction required

Direction (98): In the following question a part of the sentence is given in bold, it is then followed by three sentences which try to explain the meaning of the phrase given in bold. Choose the best set of alternatives from the five options given below each question which explains the meaning of the phrase correctly without altering the meaning of the sentence given as question.

98. There are girls in that school; droves and scads of them. Most of them beautiful, some of them not-so-good-looking (because 'ugly' is such an ugly word), but that is **neither here nor there**.
(I) Most of the girls in the school are not-so-good-looking (because 'ugly' is such an ugly word), but that doesn't make them different.
(II) There are a large number of girls in that school with most of them being beautiful and quite a few being not-so-good-looking (because 'ugly' is such an ugly word), but that is inconsequential.
(III) While most of the girls in that school are beautiful, some of them are not-so-good-looking (because 'ugly' is such an ugly word), but that makes a big difference.
(a) Only (I) is correct
(b) Only (II) is correct
(c) Both (I) and (II) are correct
(d) Both (II) and (III) are correct
(e) All are correct

Direction (99): In question given below there are two statements, each statement consists of two blanks. You have to choose the option which provides the correct set of words that fits both the blanks in both the statements appropriately and in the same order making them meaningful and grammatically correct.

99. (1) The molecular targeting of CSCs may improve the _____ of current chemotherapeutic _____ needed for the management of this disease.
(2) _____ and safety of once-daily _____ in the treatment of HIV infection is currently under inspection.
(a) Germaneness, medication
(b) Efficacy, regimens
(c) Emasculation, nutriments
(d) Potency, sustenance
(e) Sufficiency, subsistence

Direction (100): In each of the given questions an inference is given in bold which is then followed by three statements. You have to find the statement(s) from where it is inferred. Choose the option with the best possible outcome as your choice.

100. Country's economic standard can be best adjudged by per capita income.
(I) Exports and imports, a swelling favourable balance of trade, investments and bank-balances, are not an index or a balance sheet of national prosperity. Till the beginning of the Second World War, English exports were noticeably greater than what they are today. And yet England has greater national prosperity today than it ever had. Because the income of average Englishmen, working as field and factory labourers, clerks, policemen, petty shopkeepers and shop assistants, domestic workers and other low-paid workers, has gone up.
(II) It is possible that while per capita real income is increasing per capita consumption of goods and services might be falling. This happens when the Govt. might itself be using up the increased income for massive military buildup necessitating heavy production of arms and ammunitions.
(III) A rise in national income may occur as a result of increased spending on items such as defence. National income often rises in time of war, or the threat of war, because money is spent on weapons. This will push up GNP, but the people may be acutely short of goods to buy.
(a) Both (II) and (III)
(b) Both (I) and (II)
(c) Only (I)
(d) Only (II)
(e) All are correct

Direction (101): There are sets of four statements in question given below which when connected using the correct sentence structure forms a complete single sentence without altering the meaning of the sentences given in the question. There are four options given below the question, choose the sentence that forms the correct formation of single sentence which is both grammatically correct and contextually meaningful. If none follows, choose (e) as your answer.

101. There is a giant footprint of the ransomware attack; it leveraged a leaked NSA-created Windows hacking technique; it infected more than 200,000 systems across 150 countries; malware analysts say poor choices on the part of WannaCry's creators have limited both its scope and profit.

(a) The giant footprint of the ransomware attack has leveraged a leaked NSA-created Windows hacking technique and infected more than 200,000 systems across 150 countries while malware analysts say poor choices on the part of WannaCry's creators had limited both its scope and profit.

(b) Despite the giant footprint of the ransomware attack, which leveraged a leaked NSA-created Windows hacking technique to infect more than 200,000 systems across 150 countries, malware analysts say poor choices on the part of WannaCry's creators have limited both its scope and profit.

(c) Malware analysts said that poor choices on the part of WannaCry's creators have limited both its scope and profit, whereas the giant footprint of the ransomware attack leveraged a leaked NSA-created Windows hacking technique infecting more than 200,000 systems across 150 countries.

(d) The ransomware attack is a giant footprint as it has leveraged a leaked NSA-created Windows hacking technique and infected more than 200,000 systems across 150 countries which have limited both the scope and profit due to poor choices on the part of WannaCry's creators as malware analysts said.

(e) None of the above is correct.

Direction (102): The following question consists of a sentence which is divided into three parts which contain grammatical errors in one or more than one part of the sentence. If there is an error in any part of the sentence, find the correct alternatives to replace those parts from the three options given below each question to make the sentence grammatically correct. If there is an error in any part of the sentence and none of the alternatives is correct to replace that part, then choose (d) i.e. None of the (I), (II) and (III) as your answer. If the given sentence is grammatically correct or does not require any correction, choose (e) i.e. No correction required as your answer.

102. Many environmentalists think that too much interference with (I)/ nature for development projects is gradually destroying the balance and natural (II)/ calamities are happening to forewarn us about a possible doomsday in future. (III)

(I) Many of the environmentalists believe that too much interference in

(II) nature for developing new projects has destroyed the balance and natural

(III) calamities which may happen to forewarn us about doomsday possibly in future

(a) Only (II)
(b) Both (I) and (II)
(c) Both (II) and (III)
(d) None of the (I), (II) and (III)
(e) No correction required

Direction (103): In question given below there are two statements, each statement consists of two blanks. You have to choose the option which provides the correct set of words that fits both the blanks in both the statements appropriately and in the same order making them meaningful and grammatically correct.

103. (1) The six-day war was the last unalloyed military victory for Israel, and the start of a _____ from existential wars against Arab states, which it always won, to _____campaigns against non-state militias which it could never wipe out.

(2) He sees these dualities as having been maintained through the _____ by a deliberate and _____ general amnesia.

(a) Transition, enervating
(b) Progression, invigorating
(c) Concatenation, exhilarating
(d) Juncture, frivolous
(e) Movement, enfeeble

Direction (104): In this question a small paragraph is given followed by three possible inferences which may or may not be correct. The question is then followed by five options. You have to choose the option which gives the best possible outcome.

104. Techniques to increase productivity in the performance of discrete tasks, by requiring less human labour in each step of the production process, are widely utilized. Consultants on productivity enhancement point out, however, that although these techniques achieve their specific goal, they are not without drawbacks. They often instill enough resentment in the work force eventually to lead to a slowdown in the production process as a whole.

(I) The fact that productivity enhancement techniques are so widely employed has led to a decline in the ability of American business to compete abroad.

(II) Productivity enhancement techniques do not attain their intended purpose and should not be employed in the workplace.

(III) Ironically, an increase in the productivity of discrete tasks may result in a decrease in the productivity of the whole production process.

(a) Only (I) is correct
(b) Only (II) is correct
(c) Only (III) is correct
(d) Both (I) and (III) are correct
(e) None of the given inferences is correct.

Direction (105): In question given below there are two statements, each statement consists of two blanks. You have to choose the option which provides the correct set of words that fits both the blanks in both the statements appropriately and in the same order making them meaningful and grammatically correct.

105. (1) The obvious _____between China's level of participation and other Asian states' requires some _____.
(2) For years there has been talk Aldo's lazy performances had more to do with a brutal weight cut than any skill _____. That's always been a pretty probable _____, given the number of horrendous weight cuts MMA sees.
(a) Deviation, delineation
(b)Discrepancy, explanation
(c) Incongruity, cogitation
(d) contrast, contemplation
(e) Contrariety, rumination

Direction (106): There are sets of four statements in question given below which when connected using the correct sentence structure forms a complete single sentence without altering the meaning of the sentences given in the question. There are four options given below the question, choose the sentence that forms the correct formation of single sentence which is both grammatically correct and contextually meaningful. If none follows, choose (e) as your answer.

106. Pro-Russian hackers bombarded the sites of opposition leaders; it included Garry Kasparov in the midst of his 2007 campaign for president; it started in the late 2000s; it kept Kasparov's site offline or sluggish at key moments during the campaign season.
(a) Bombarding the sites of opposition leaders including Garry Kasparov the midst of his 2007 campaign for president in the late 2000s, Kasparov's site was kept offline or sluggish at key moments during the campaigning season.
(b) In the late 2000s, pro-Russian hackers started bombarding the sites of opposition leaders that included Garry Kasparov in the midst of his 2007 campaign for president and keeping Kasparov's site offline or sluggish at key moments during the campaign season.
(c) Starting in the late 2000s, pro-Russian hackers bombarded the sites of opposition leaders like Garry Kasparov in the midst of his 2007 campaign for president, keeping Kasparov's site offline or sluggish at key moments during the campaign season.
(d) The sites of opposition leaders like Garry Kasparov was kept offline or sluggish at key moments during the campaigning season by pro-Russian hackers who bombarded the sites in the midst of his 2007 campaign for President.
(e) None of the above is correct.

Direction (107): The following question consists of a sentence which is divided into three parts which contain grammatical errors in one or more than one part of the sentence. If there is an error in any part of the sentence, find the correct alternatives to replace those parts from the three options given below each question to make the sentence grammatically correct. If there is an error in any part of the sentence and none of the alternatives is correct to replace that part, then choose (d) i.e. None of the (I), (II) and (III) as your answer. If the given sentence is grammatically correct or does not require any correction, choose (e) i.e. No correction required as your answer.

107. Career diplomats in the State Department are wringing (I)/ the hands of diplomats in despair after seeing their president (II)/ uncorking US policies which had taken decades at maturing. (III)
(I) Diplomacy in Career in the State Department has wringed
(II) their hands in despair at seeing their president
(III) uncorking US policies that have taken decades to mature
(a) Both (II) and (III)
(b) Both (I) and (III)
(c) All (I), (II) and (III)
(d) None of the (I), (II) and (III)
(e) No correction required

Direction (108): In each of the given questions an inference is given in bold which is then followed by three statements. You have to find the statement(s) from where it is inferred. Choose the option with the best possible outcome as your choice.

108. GDP fluctuates because of the business cycle.
(I) The downturn of a busi-ness cycle is called a recession, which is defined as a period in which real GDP declines for at least 2 con-secutive quarter-years. The recession begins at a peak and ends at a trough. After the downward phase reaches bottom and economic conditions begin to im-prove, the economy gradually enters the expansionary phase.
(II) As interest rates rise, companies and consumers cut back their spending, and the economy slows down. Slowing demand leads companies to lay off employees, which further affects consumer confidence and demand. To break this vicious circle, the central bank eases monetary policy to stimulate economic growth and employment until the economy is booming once again. Rinse and repeat.

(III) High levels of investment as a share of GDP might be superb for creating extra capacity to produce but at the expense of consumer goods and services for the current generation. This imbalance is one of the reasons why GDP data may give a distorted picture of living standards in a country.

(a) Only (I)
(b) Both (II) and (III)
(c) Both (I) and (II)
(d) Only (II)
(e) All are correct

Direction (109): In question given below there are two statements, each statement consists of two blanks. You have to choose the option which provides the correct set of words that fits both the blanks in both the statements appropriately and in the same order making them meaningful and grammatically correct.

109. (1) Polish environment minister to _____ over COP24 conference, the choice was made _____ by the climate-change committee of the United Nations.
(2) The Labour Party is led by two Marxists: Mr Corbyn and John McDonnell, his shadow chancellor, who believe in the materialist interpretation of history. Yet they now _____ over a coalition of voters defined _____ by their shared values.

(a) Debate, diligently
(b) Concoct, congruently
(c) Supervise, perspicaciously
(d) Conduct, unanimously
(e) Preside, overwhelmingly

Direction (110): In each of the given questions an inference is given in bold which is then followed by three statements. You have to find the statement(s) from where it is inferred. Choose the option with the best possible outcome as your choice.

110. The calorie count of foods that are high in carbohydrates is significant.

(I) Moderate use of nonnutritive sweeteners like aspartame for low calorie count could have a positive effect on insulin and blood sugar by aiding weight control. It is also important to keep in mind that many foods containing aspartame still provide calories and carbohydrate from other ingredients, even though they may be labeled "sugar-free."
(II) Ironically, people who use aspartame as a sweetener to reduce their calorie intake could wind up defeating their purpose, since studies show that high levels of aspartame may trigger a craving for carbohydrates by depleting the brain of a chemical that registers carbohydrate satiety.
(III) Forty-five to 65 percent of your total calories should come from carbs, recommends the Institute of Medicine. If you consume carbs on a regular basis, glycogen stores stay full and become a normal part of your total body weight. The rise in the popularity of Aspartame is due to its comparatively low calorie count.

(a) Only (I)
(b) Only (II)
(c) Both (I) and (II)
(d) Both (II) and (III)
(e) All are correct.

Direction (111): There are sets of four statements in question given below which when connected using the correct sentence structure forms a complete single sentence without altering the meaning of the sentences given in the question. There are four options given below the question, choose the sentence that forms the correct formation of single sentence which is both grammatically correct and contextually meaningful. If none follows, choose (e) as your answer.

111. Hong Kong has prospered economically; it is visible from US $177 billion GDP in 1997 to $319 billion; it has risen by 80 per cent; it has been building on her strengths of superior infrastructure, free port and low-tax status, and her superior financial and logistic hubs.

(a) Economically, Hong Kong has prospered visibly, from US $177 billion GDP in 1997 to $319 billion, rising by 80 per cent, building on her strengths of superior infrastructure, free port and low-tax status, and her superior financial and logistic hubs.
(b) Hong Kong has been prospering economically which is visible from US $177 billion GDP in 1997 to $319 billion that has risen by 80 per cent which has been building on her strengths of superior infrastructure, free port and low-tax status, and her superior financial and logistic hubs.
(c) Building on her strengths of superior infrastructure, free port and low-tax status, and her superior financial and logistic hubs, Hong Kong has prospered economically visible from US $177 billion GDP in 1997 to $319 billion that has risen by 80 per cent.
(d) Hong Kong has made visibly a prosperous economic condition rising by 80 per cent from US $177 billion GDP in 1997 to $319 billion which shows that it has been building on her strengths of superior infrastructure, free port and low-tax status, and her superior financial and logistic hubs.
(e) None of the above is correct.

Direction (112): The following question consists of a sentence which is divided into three parts which contain grammatical errors in one or more than one part of the sentence. If there is an error in any part of the sentence, find the correct alternatives to replace those parts from the three options given below each question to make the sentence grammatically correct. If there is an error in any part of the sentence and none of the alternatives is correct to replace that part, then choose (d) i.e. None of the (I), (II) and (III) as your answer. If the given sentence is grammatically correct or does not require any correction, choose (e) i.e. No correction required as your answer.

112. Around 1960s it was widely assumed about politics which had been (I)/ divided from religions and after societies started becoming more industrialized, religious (II)/ belief and practice were restricted to private thought and action. (III)

(I) Politics was assumed widely till about 1960s that it is

(II) divided out of religion and as societies were becoming more industrialized, religious

(III) beliefs and practices should have restricted to private thoughts and actions.

(a) Only (I)
(b) Both (II) and (III)
(c) Both (I) and (II)
(d) None of the (I), (II) and (III)
(e) No correction required

Direction (113): In the following question a part of the sentence is given in bold, it is then followed by three sentences which try to explain the meaning of the phrase given in bold. Choose the best set of alternatives from the five options given below each question which explains the meaning of the phrase correctly without altering the meaning of the sentence given as question.

113. Having studied the laws of social development and of capitalism, Marx sought to prove that the destruction of capitalism was inevitable, for it had given rise to its **own grave diggers**.

(I) After studying the laws of social development and of capitalism, Marx was assured that there would be complete destruction of capitalism as the ones who constructed it would themselves be responsible for its downfall.

(II) The laws of social development and of capitalism were so deplorable that Marx felt that it would destroy Capitalism and sooner it would give rise to a new destructive method.

(III) Marx's studies suggested that the laws of social development and capitalism were so woeful that desolation of capitalism was certain and nobody else than these laws themselves would be accountable for its destruction.

(a) Only (I) is correct
(b) Only (III) is correct
(c) Only (III) is correct
(d) Both (I) and (II) are correct
(e) All are correct

114. If Sentence (C), "Presidential contests in India are usually tame and predictable, and 2017 does not promise to be any different" is the first sentence, what is the order of other sentences after rearrangement?

(A) Prime Minister Indira Gandhi called for a "conscience vote" just before the election, and a sizeable number of Congress parliamentarians and legislators voted against the "official" candidate, Reddy, in favour of Giri.

(B) The Bharatiya Janata Party, with its regular allies and new-found friends, should be able to see any non-controversial candidate through.

(C) Presidential contests in India are usually tame and predictable, and 2017 does not promise to be any different.

(D) To date, the election of V.V. Giri over Neelam Sanjiva Reddy in 1969 remains the only notable exception to the long list of humdrum presidential elections.

(E) Before and after that, however, the favourites have carried the day, with opposition-sponsored candidates putting up no more than a symbolic fight to prove no more than a political point.

(F) At present, the numbers are stacked against the opposition for the July 17 election.

(a) AEFBD (b) FBADE (c) DAEFB
(d) AFDBE (e) DBFEA

115. If sentence (C), "The IS immediately claimed responsibility for the attack that killed 12 people" is the last sentence of the paragraph, then which of the following sentences does not fit into the paragraph formed after rearranging other sentences?

(A) The terrorists clearly wanted to send a message to the Iranian state, and they retained the element of surprise.

(B) The attack, the first major terror incident in Iran in many years, suggests that even the formidable security cover put in place by the elite Revolutionary Guards can be breached by terrorists.

(C) The IS immediately claimed responsibility for the attack that killed 12 people.

(D) But the attacks and the Iranian reaction must also be seen in the context of heightened Saudi Arabia-Iran rivalry.

(E) Wednesday's attacks in Tehran targeted the two most significant symbols of the 1979 Revolution — the Parliament and the tomb of Ayatollah Khomeini, the founder of the Islamic Republic.

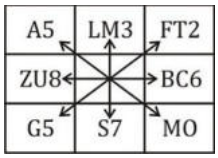
(F) Though it is involved in the fight against the Islamic State in Iraq and Syria, Iran has so far largely remained insulated from the regional crises.

(a) A (b) E (c) F
(d) D (e) C

Solutions

REASONING ABILITY

Directions (1-2):



The alphabets are arranged according to the direction of arrows.

MO5	S3	G2
BC8		ZU6
FT5	LM7	A

Step-1

MO2	S3	G2
AB8		ZU3
FT5	KL7	A

Step-2

In step 3, the elements arranged in the first and third column in such way that the element in third row placed in first row and first row element is placed in second row and second row element is placed in third row. The alphabet of first row second column is replaced with the alphabet which is three places after the alphabet in alphabetical series. The alphabet of third row second column is replaced with the alphabet which is five places after the alphabet in alphabetical series.

FT5	V3	A
MO2		G2
AB8	PQ7	ZU3

Step-3

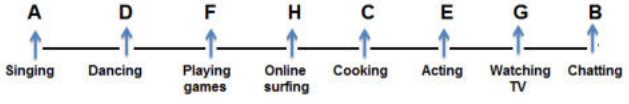
1. (b); 2. (d);

Directions (3-4):

3. (d); As stated in statement America is not taking any steps to address the issue, so to calm down the situation Indian Govt. may pressurize American Govt. or there may be impact on Indian-US trade. And as stated in statement America is not taking any action despite of racism attack on Indians which results death of two citizens. So it cannot be assumed that American Govt. will give life imprisonment according to the statement.

4. (c); All of three supports the negligence of Indian-American Govt. as Modi Govt. denies replying in same week after racial attack. American Govt. is not ready tackle the issue despite of environment of racism is spreading.

Directions (5-7):



5. (d); 6. (b); 7. (d);

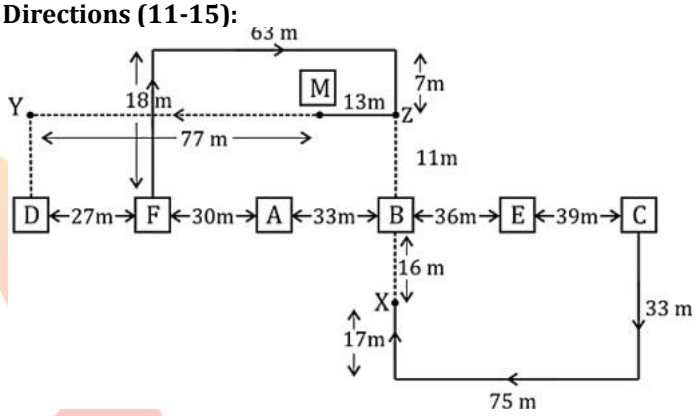
Directions (8-10):

8. (d); train is scheduled at= 5 hour 10 minute = #&
Time should he leave to reach the station 5 minute earlier= 5 hour 10 minute-(25+5) minute= 4 hour 40 minute

9. (a); 4 hour 15 minute

10. (b); Scheduled time of departure of train= @%= 8:00 PM Time for travel+ early arrival= 4 hour 15 minutes + 25 minutes = 4 hour 40 minutes 8:00 PM- 4 hour 40 minutes= 3:20 PM= £$

Directions (11-15):



11. (b); 12. (e); 13. (a);

14. (d); 15. (d);

16. (a); Statement (a) is the correct option because it clearly strengthen the argument that persons with sufficient qualification prefer to go to industrial field rather than to go in academics as a faculty in business schools.

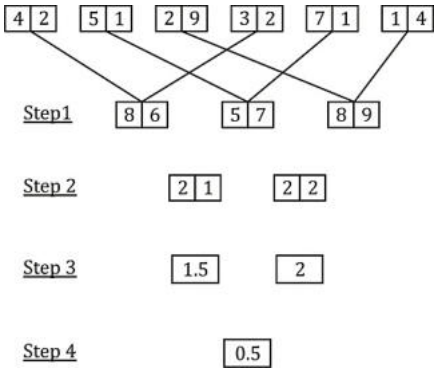
17. (d); Option (d) is an assumption. Any appeal has some effects and people may generally respond positively to the appeal.

Directions (18-20):

For step-I, both the numbers of 1st block is written as, Ist number of block-1 of the Input is multiplied with 2nd no. of block-4 of the Input same as 2nd number of block-1 is multiplied with 1st number of block-4. This process is same for Block-2 and Block-3 in step-1.
For step-II, All 1st digit of each block is added and that sum is written in 1st block and all 2nd digit of each block is added and that sum is written as 2nd block.

For step-III, Half of the addition of 1st and 2nd digit of each block.

For Step- IV, Difference of both numbers of Step-3.
So,
INPUT: 42 51 29 32 71 14
Step-1: 86 57 89
Step-2: ....21....22....
Step-3: ....1.5....2....
Step-4:.....0.5.....

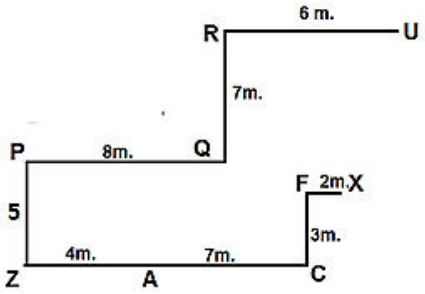


18. (d); 19. (b); 20. (b);

21. (d); Both I and II can't be assumed from the given statement as statement I is vague and II statement is also not implicit because it is mentioned in the statement that science should be read with as much interest as we read news.

Directions (22-23):

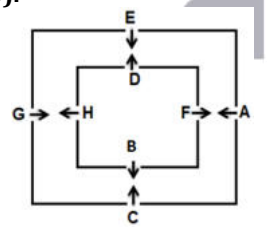
22. (c); From all the statements



23. (c);

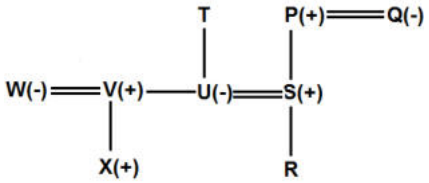
24. (c); Option (c) contradicts the views expressed in the statement.

Directions (25-26):



25. (d); 26. (e);

Directions (27-28):



27. (e); 28. (a);

Directions (29-30):

29. (b); The disease occurs at the end of monsoons every year. So, precautionary measures every four years shall not help. The second course of action shall be a preventive measure. So, only course II follows.

30. (e); Clearly, the library needs to be provided with the essential facilities and trained personnel for better services. So, both the courses follow.

Direction (31-35):

Month	Date	Lecturer	No. of students
April	7	R	72
April	21	U	84
May	7	P	67
May	21	V	55
June	7	T	80
June	21	Y	68
September	7	Q	64
September	21	X	78
December	7	S	77
December	21	W	69

31. (c); 32. (d); 33. (a);

34. (b); 35. (c);

Directions (36-37):

36. (d); 6, 12, 14, 20 – I, D, T, R
Word formed is DIRT. So second letter – I

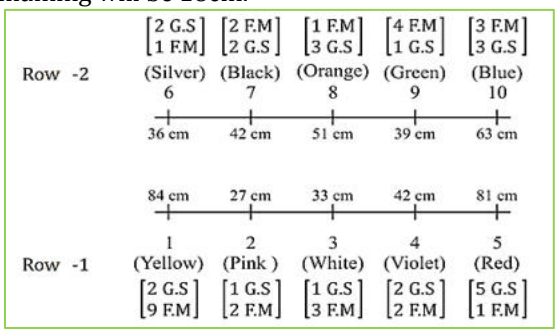
2 - U
4 - A
6 - I
8 - C
10 - P
12 - D
14 - T
16 - E
18 - N
20 - R
22 -
24 - S

37. (c); 10 is P. So 3 letters between 10 and 22. P + 3 = T, but T is already written . We cannot repeat any letter. So P – 3 = L
So against 22 is L Now 18 is N. 22 is L. So between them is only 1 letter in English alphabetical series i.e. M

2 - U
4 - A
6 - I
8 - C
10 - P
12 - D
14 - T
16 - E
18 - N
20 - R
22 -
24 - S

38. (c); Statement (c) is the correct option because according to this, the increase in crime rate has been contributed by other factors, not leniency in the punishment.so it weakens the given passage.

Directions (39-43): Each glass slab is 15 cm and photo frame is 6 cm. Total length of row-1 is 267 and that of row 2 is 249 cm but as the total length of the glass slabs of row-2 is 231, so the remaining will be 18cm.



39. (c);

40. (e);

41. (b);

42. (c);

43. (b);

44. (d); Most logically such comparison should reveal mortality rate per thousand doctors indulged in SARS treatment and not indulged in treatment.so statement (d) is the correct option.

45. (b);

QUANTITATIVE APTITUDE

46. (b); For quantity I →
First the different no. of ways to arrange 5 men or 5 women = 5!
Now,
_M_M_M_M_M_
No. of ways of arranging 5 men and 5 women such that no two women or men sit together = $2 \times 5! \times 5!$
For quantity II →
No. of ways of arranging 5 men and 5 women such that all men sit together → $6! \times 5!$
$\because 2 \times 5! \times 5! < 6! \times 5!$
Then Quantity I < Quantity II

47. (b); Since S is an acute angle
$\therefore (a + 40) + a < 90$
$(2a + 40) < 90$
$2a < 50$
$a < 25°$
$\therefore$ Quantity I < Quantity II

48. (a); For Quantity I →
Let required no = 10x+ y
$\therefore 10y + x = 10x + y + 36$
$9y - 9x = 36$
$y - x = 4$
$\therefore$ unit digit of the no. should be 4 more than the ten's digit of the number.
$\therefore$ such possible numbers from 1 to 63 are
= 04, 15, 26, 37, 48, 59
$\therefore$ Required probabity $= \frac{6}{63}$
For quantity II →
Possible numbers from 1 to 63 = 8, 24, 40, 56
Required probability $= \frac{4}{63}$
$\therefore$ Quantity I > Quantity II

49. (b); From A → m + n = 10 × k (Let k is an integer value)
From B → 10m + 7n = 70 × l (let l is an integer value)
From C → n > m
From Only B
We can see that if 'l' is an integer then 'm' should be multiple of 7 while 'n' should be multiple of 10. Hence n is divisible by 10. Thus statement B is sufficient to solve the question.

50. (b); Let speed of boat in still water on Thursday = x
$\frac{12\times18}{x-1} = \frac{16\times15}{16+2} = \frac{12\times18\times18}{16\times15} = x - 1$
$x - 1 = 16.2$
$x = 17.2$ kmph

51. (c); Let speed of boat in still water on Monday = x
$\frac{15\times18}{x-2} = \frac{45}{11} + \frac{16\times15}{x+2}$
$15\left(\frac{18}{x-2} - \frac{16}{x+2}\right) = \frac{45}{11}$
$\frac{18}{x-2} - \frac{16}{x+2} = \frac{3}{11}$
If we put x= 20
Then it satisfy the above equation
$\therefore x = 20$ kmph

52. (d); Speed of boat in still water on Tuesday = 15 km/hr
$66\frac{2}{3}\% = \frac{2}{3}$
Speed of boat in still water on Wednesday $= 15 + \frac{2}{3} \times 15$
$= 25$ km/hr
$\frac{14\times18}{25-x} = \frac{14\times15}{(15+3)} \times \frac{9}{10}$
$180 \times 6 = 45\ (25 - x)$
$X = 25 - 24 \Rightarrow x = 1$ km/hr

53. (a); Given
Speed of boat in still water on Saturday
= 21 km/h
$28\frac{4}{7}\% = \frac{2}{7}$
$\therefore$ Speed of boat in still water on Sunday
$= 21 - \frac{2}{7} \times 21 = 21 - 6 = 15$ kmph
$\frac{10\times18}{21-x} = \frac{19}{16} \times \frac{10\times15}{15+4}$
$x = 1.8$
Required time $= \frac{57.6}{21-1.8} = \frac{57.6}{19.2} = 3$hrs

54. (a); $\frac{18\times18}{x-4} = 2 + \frac{12\times15}{17+1}$
$18 \times 18 = 12\,(x-4)$
$x - 4 = 27$
$x = 31$ kmph
Required upstream speed
$= 31 - 4 = 27$ kmph

Solutions (55-57)
For Bag A –
No. of yellow balls = 18
No. of green balls = 18 + 4 = 22
According to the question
Total no. of balls in bag A are in multiple of 13.
so by hit and trial method.
If we assume total no. of balls in bag A = 65
Then, No. of black balls = 25
It satisfies the probability Statement given in the question.
By similar method for Bag B —
No. of Yellow balls = 22
No. of Green balls = 25
No. of Black balls = 28
For Bag C →
No. of Yellow balls = 42
No. of Green balls = 21
No. of Black balls = 15

55. (d); After replacement →
Yellow no of balls in beg B = 22 – x
Black no. of balls in beg B = 28+ 5 = 33
Green no. of balls in bag B = 25
Then, $\frac{33}{22-x+33+25} = \frac{11}{26}$
$\frac{33}{80-x} = \frac{11}{26}$
$78 = 80 - x$
$x = 2$

56. (e); Required probability
$= \frac{18}{65}\times\frac{22}{75} + \frac{22}{65}\times\frac{25}{75} + \frac{25}{65}\times\frac{28}{75} = \frac{1646}{65\times75}$

57. (c); Required % $= \frac{40-1}{40}\times100 = \frac{39}{40}\times100$
$= 97.5\%$

58. (c); Let MP of item-II by seller A = 100x
∴ MP of item-II by seller C = 100x
$\frac{\frac{100}{100+s}\times68x}{\frac{100}{100+2s-4}\times84x} = \frac{17}{21}$
$\frac{68}{84}\times\frac{96+2s}{100+s} = \frac{17}{21}$
$\frac{96+2s}{100+s} = \frac{1}{1}$
$96 + 2s = 100 + s$
$s = 4$

59. (b); Let mark price of item II = 100x
Let mark price of item III = 100y
∴ $100x + 100y = 6000$
$x + y = 60$ ... (i)
And, $72x - 84y = 420$
$6x - 7y = 35$ ... (ii)
From (i) and (ii)
$y = 25$
$x = 35$
∴ M.P of item II = 3500
M.P. of item III = 2500
Required % $= \frac{3500-2500}{2500}\times100 = \frac{1000}{25} = 40\%$

60. (a); Let M.P. of item II = 100a
∴ S.P. of item II by seller A = 68a
S.P. of item II by seller B $= (100 - x)a$
Then $(168 - x)a = (3888) \times 2$
$(184 - x)a = 4320 \times 2$
∴ $\frac{168-x}{184-x} = \frac{9}{10}$
$(10 \times 168) - 10x = 9 \times 184 - 9x$
$x = 24 \Rightarrow a = 54$
Now S.P. of item II by seller C = 4536 Rs.

61. (e); Let S.P. of item I = 500
∴ S.P. of item III = 600
C. P. of item I $= \frac{100}{125}\times500 = 400$
C. P. of item II $= \frac{100}{120}\times600 = 500$
Profit on item I = 500 – 400 = 100
∴ 100 → 750
1 → 7.5
Total profit = (200) → (200 × 7.5) = 1500 Rs.

62. (a); C.P. = 60 Rs.
M. P. $= \frac{200}{300}\times60 + 60 = 40 + 60 = 100$
Total C.P. = 60 × 5 = 300 Rs.
Total selling price should be = 380 Rs.
S.P. of item III by seller E = (380 – 64 – 67 – 86 – 84)
= 79
∴ Minimum required discount = (100 – 79)
= 21%

63. (b); From question we observe that sum of investment of A and C is equal to B for first quarter.
So, if ratio of investment of B is equal to (A + C) for all quarters of year then B's profit is 50% of total profit.
So profit of B $= \frac{125000}{2} = 62500$

64. (b); Total amount invested by A + B in a year
$\Rightarrow 2500 + 7x + 7y + 13z = 9000$ ... (i)
Total amount invested by B and C in a year
$\Rightarrow 2300 + 8x + 7y + 13z = 10500$ ... (ii)
From (i) and (ii)
$200 - x = -1500$
$x = 1700$
Total amount for second quarter = 17000

65. (d);
P ——— Q
A → ← B
54 kmph 66 kmph
In $\frac{1}{2}$h train A will cover = 27 km
Distance between P and Q (x) $= 27 + \frac{13}{3}\times120$
$= 27 + 520 = 547$ km
Total time taken in given condition
$= \left(\frac{1}{2} + \frac{13}{3}\right)$h $= \frac{29}{6}$h

New time taken according to condition
$= \frac{547+2\times54}{(66-54)} = \frac{655}{12}$h
Required difference in time $= \frac{655}{12} - \frac{29}{6} = \frac{597}{12}$
= 49 hour 45 min.

66. (c); Required ratio $= \frac{66-54}{66+54} = 1 : 10$

67. (a); Area of quadrilateral BFDE = Area of rectangle ABCD – Area of ΔABE – Area of ΔDCF = 120 − 30 − 25 = 65
Quantity I > Qunatity II

68. (a); Ratio of Investment of A, B and C
$(3000 \times 4 + 1800 \times 5 + 3600 \times 3) : (4000 \times 4 + 8000 \times 5) : (14000 + 33600)$
31800 : 56000 : 47600
159 : 280 : 238
Profit of C $= \frac{238}{677} \times 677000 = 238000$
Average of profit earned by (A + B + C)
≈ 225666
∴ Quantity I > Quantity II

69. (b); Let the C do in one day = 4y work
Let the D do in one day = 5y work
2 day work of C + D = 9y
In 44 day they will complete 9y × 22 = 198y
In another $\frac{1}{2}$ days 2y work will be done by C
C will take $= \frac{200y}{4y}$ days = 50 day
D will take = 40 days.
C and D will complete work together in
$= \frac{50\times40}{90} = \frac{200}{9}$
According to condition
$\frac{200}{9x} + \frac{200}{9\times2x} = 1$
$\frac{400+200}{18x} = 1 \Rightarrow x = 33\frac{1}{3}$

70. (a); Let E do work in 4x days
Let F do work in 5x days
$\frac{24}{5x} + \frac{24}{4x} + \frac{20}{\frac{100}{3}} + \frac{20}{\frac{200}{3}} = 1$
$24\left(\frac{9}{20x}\right) + \frac{60}{100} + \frac{60}{200} = 1$
$\frac{24\times9}{20x} = 1 - \frac{180}{200}$
$\frac{24\times9}{20x} = \frac{1}{10}$
x = 108
Together E and F can do work in
$= \frac{4\times108\times5\times108}{9\times108} = 240$ days
Required difference $= \frac{240}{4\times108} - \frac{240}{5\times108}$
$= \frac{240}{108}\left(\frac{1}{20}\right) = \frac{1}{9}$

71. (e); As per given condition
$\frac{5}{10} + \frac{5}{15} + \frac{x}{12} + \frac{x}{18} = \left(1 - \frac{1}{36}\right)$
$\frac{5x}{36} = \frac{35}{36} - \frac{5}{6}$
$x = \frac{36}{5}\left(\frac{35-30}{36}\right) = 1$ days.

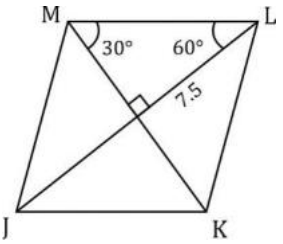
72. (d); Part of work completed by E $= \frac{5}{20} = \frac{1}{4}$
3 day work by (A + B + D) $= \frac{1}{10} + \frac{1}{12} + \frac{1}{18}$
$= \frac{18+15+10}{180} = \frac{43}{180}$
9 day work = (3A + 3B + 3D) $= \frac{129}{180}$
Remaining work $= \frac{3}{4} - \frac{129}{180}$
$= \frac{135-129}{180} = \frac{6}{180} = \frac{1}{30}$
this will be done by A in $= \frac{1}{30} \times 10 = \frac{1}{3}$ days
so B worked for 3 days.

73. (d); Work done by A, C and E on Job Z $= \frac{2}{10} + \frac{2}{15} + \frac{2}{20} = \frac{12+8+6}{60} = \frac{26}{60} = \frac{13}{30}$
Remaining work done by B and D in 20x and 21x
$\frac{20x}{12} + \frac{21x}{18} = \frac{17}{30}$
$\frac{60x+42x}{36} = \frac{17}{30} \Rightarrow 102x = 17 \times \frac{36}{30}$
$x = \frac{6}{30} = \frac{1}{5}$
Required days $= 20 \times \frac{1}{5} = 4$ days

74. (c); According to question
$\frac{2}{10} + \frac{4x}{12} + \frac{3}{15} + \frac{3x}{18} + \frac{2}{20} = 1$
$\Rightarrow \frac{1}{5} + \frac{x}{3} + \frac{1}{5} + \frac{x}{6} + \frac{1}{10} = 1$
$\frac{6+10x+6+5x+3}{30} = 1$
15x + 15 = 30
x = 1
Required difference = 4x − 3x
= 4 − 3 = 1

75. (d); With new efficiency C will complete job in
= 12 days
3 days work of C and 1 day work of B = 1/3
Days required = 9 days

76. (b); Rhombus PQRS:
Side of PQRS $= \frac{\sqrt{6^2+8^2}}{2} = \frac{10}{2} = 5$ cm
Rhombus MLKJ



$\sin 30 = \frac{\text{perpendicular}}{\text{Hypotenuse}}$
$\frac{1}{2} = \frac{7.5}{\text{side of MLJK}}$
Side of MLJK = 15 cm
Now, AB = 5 cm
CD = 15 cm
So median XY $= \frac{5+15}{2} = 10$ cm

77. (c); After 20% of the contents of the vessel are removed,
Remaining contents = $\frac{80}{100}(12.5) = 10$ litres.
Ratio of water and milk in it = 1 : 4.
∴ It contains $\frac{4}{5}(10) = 8$ litres of milk and 2 litres of water.
To reverse the ratio, 2 litres of water must be made 32.
∴ x = 30 litres of water must be added.
To reverse this ratio again 8 litres of milk must be made 4(32) = 128 litres.
∴ y = 128 – 8 = 120 litres of milk must be added.

78. (b); We can get ratio of investment from either statement B alone or C alone so profit of B can be determined from option b

79. (d); From A and C we can determine the value ratio of efficiency between men, women and children from A & B we can also determine the value of ratio of men, women and children. We can calculate the answer from B and C.

80. (c); From A
Total price $= \frac{3828\times100}{120}$
From C
$(x + y) - (x - y) = 28$
$y = 14$
And x+y = 90 (From B)
x =76
So total value can be determined

ENGLISH LANGUAGE

81. (d); Read the paragraph 1 carefully, the phrase "Unfortunately, this is a common problem" refers to the common problem that every organization is facing nowadays with the variability in the decision-making process by their employees. Options (a), (b) and (c) support the given statement while option (d) does not follow the statement as it states that their decisions are often rationale and in best interest of the organization which is almost opposite to the problem mentioned in the paragraph. Hence (d) is the correct option.

82. (c); Read the second paragraph carefully, "We call the chance variability of judgments noise. It is an invisible tax on the bottom line of many companies." Hence it can be inferred that both the options (II) and (III) define the problem of noise as the author has tried to explain in the passage.

83. (d); Read the fourth paragraph carefully, it can be easily inferred from there that statements (I) and (II) are the reasons behind considering decision as a matter of judgment. Hence (d) is the correct option.

84. (a); Read both the paragraphs 4 and 5 carefully, they generally cite certain examples with statistical figures carried out via different research works. Hence among the given options, sentence (a) can make a connection with Paragraph 5 if it follows Paragraph 4.

85. (e); Read the last paragraph carefully, the author seems serious on these issues which are clearly mentioned in these three statements. Hence all three are correct in context of the passage.

86. (d); Read the first paragraph carefully, it is clearly mentioned that though Deutsche is struggling to make a decent return, it still has fewer non-performing loans as compared to other banks in the market. Also it has a stack of derivatives whose prices are hard to observe in the market. Hence both sentences (II) and (III) justify the above statement.

87. (c); Read the second paragraph carefully, it can be inferred that Deutsche is piled up with every new problems which is shocking to European bureaucrats though its condition is still better than other existing banks in the market. Hence (c) is the correct option in context of the passage.

88. (e); Read the third paragraph carefully, options (a), (b), (c) and (d) can be easily inferred from the paragraph while option (e) talks about the projected fall of returns on equity towards zero which is not mentioned in the paragraph. Hence (e) is the correct option.

89. (a); Read both the paragraphs carefully, among the given options only option (a) can be connected with Paragraph 5. Other options are out of context.

90. (d); After going through the passage, only options (I) and (II) seem probable solutions to the problem being faced by European banks. Hence (d) is the correct option.

91. (a); Among the given options, all sentences, except (a) are either contextually different or grammatically incorrect. Only sentence (a) forms the correct sentence which follows the sentences given in the question both grammatically and contextually.

92. (b); The use of 'few' is incorrect in the third part of the sentence; it should be 'some'. Also "dispute between some…" is the correct grammatical usage.

93. (b); The phrase "**a western construct**" in the sentence denotes the culture and practices followed in western societies. Among the given statements, only (II) is able to explain the meaning correctly. Hence (b) is the correct choice.

94. (c); 'Relevant, obscure' fits the two blank most appropriately.
Relevant means closely connected or appropriate to what is being done or considered while **obscure** means not discovered or known about; uncertain.

95. (d); Statement (II) is incorrect, refer to "Most debate over ……..and migration" therefore it is definitely not the major concern but is just a new factor. Statement (I) and (III) both are correct as security is the major concern. You may get confused with cyber-security but it is also a part of the security system.

96. (d); All other options except (d) are either grammatically incorrect or contextually meaningless. Hence (d) is the correct option which is both grammatically correct and contextually similar to the given question.

97. (b); In the first part of the sentence, 'have been' should be replaced by 'had' as the sentence is in Past Tense. In part (III), "meant it should be given" is the correct phrase to make the sentence grammatically correct.

98. (b); The phrase "neither here nor there" is a phrasal verb of "here", meaning of no importance or relevance. It is very clear that among the three sentences, statements (I) and (III) lack the correct meaning of the phrase as they derive different meanings to the actual sentence. Moreover, sentence (I) is incomplete and meaningless. Thus both these sentences are eliminated on the context of their incorrect phrasal meanings. However, sentence (II) provides the correct and exact meaning of the phrase without altering the meaning of the original sentence. The word "**inconsequential"** means not important or significant. Hence (b) is the correct choice.

99. (b); 'Efficacy, regimens' fits the two blank most appropriately.
Efficacy means the ability to produce a desired or intended result.
Regimen means a prescribed course of medical treatment, diet, or exercise for the promotion or restoration of health.

100. (c); Per capita income is the ratio of real national income and total income. Statement (III) is talking specifically about the per capita income and therefore is not the parent statement. Statement (II) is incorrect as it is in conflict with the idea conveyed by the inference. Only statement (I) is correct and therefore option (c) is the correct choice for the given question.

101. (b); Among the given options, only (b) forms the correct sentence which is correct and meaningful both in terms of grammar and context. Other options are either grammatically incorrect or contextually meaningless. Hence (b) is the correct choice.

102. (e); The given sentence is grammatically correct.

103. (a); 'Transition, enervating' fits the two blank most appropriately.
Transition means the process or a period of changing from one state or condition to another.
Enervating means make (someone) feel drained of energy or vitality.

104. (c); Only option (c) is correct, refer "slowdown in the production process as a whole". Other options are giving conclusions which were not intended by the statement at all.

105. (b); 'Discrepancy, explanation' fits the two blank most appropriately.
Discrepancy means an illogical or surprising lack of compatibility or similarity between two or more facts

106. (c); Only option (c) among the given options forms a meaningful and grammatically correct sentence. Other options are either grammatically incorrect or contextually different. Hence (c) is the correct choice.

107. (a); The correct phrase in part (II) should be "at seeing" in place of "after seeing". In part (III), replace "which had taken decades at maturing" by "that have taken decades to mature" as the sentence is in Present Tense. Part (I) does not require any correction as it is grammatically correct.

108. (d); Only statement (II) is correct as the given inference is about the reasons for fluctuation in GDP and is not indicating about the living standard which was the case in statement (III). Statement (II) on the other hand is talking about the "lay off" which is indirectly connected to the GDP fluctuation. Important thing here is the understanding of the concept.

109. (e); 'preside, overwhelmingly' fits the two blank most appropriately.
Preside means be in the position of authority in a meeting or other gathering.
Overwhelmingly means to a very great degree or with a great majority.

110. (c); Both the paragraphs (I) and (II) are correct and the given statement is inferred from these two. Paragraph (III) is incorrect as it is not indicating in any manner that food containing carbohydrates are significantly high in calories. Both (I) and (II) are emphasizing the impact of aspartame for reducing calorie intake and then are contradicting it by stating that somehow it has failed in its purpose as carbohydrate gets successful in finding its way in our food system.

111. (a); Among the given options, all other sentences, except (a) are either contextually meaningless or grammatically incorrect. Only sentence (a) forms the correct sentence which follows the sentences given in the question both grammatically and contextually. Hence option (a) is the correct choice.

112. (d); The given sentence requires correction in all three parts but none of the given options are correct enough to form a grammatically correct sentence. So (d) is the correct choice.
The grammatically correct sentence is, "Till about the 1960s it was widely assumed that politics was divided from religion and that as societies became more industrialized, religious belief and practice would be restricted to private thought and action."

113. (c); The phrase "**own grave diggers**" is an adjusted phrase of "digging one's own grave" which means doing something unwise that will result in one's own failure or downfall in the future. In this case means, the laws of Capitalism would themselves be responsible for the destruction of Capitalism. Hence only sentence (III) is correct in explaining the sentence properly.

114. (c); As mentioned in the question, if sentence (c) is the first sentence then the correct order of other sentences after rearrangement is **DAEFB**.

115. (d); As mentioned in the question, sentence (C) "The IS immediately claimed responsibility for the attack that killed 12 people" is the last sentence of the paragraph. EAFBC forms a coherent paragraph. The paragraph talks about the Terror attack in Tehran by terrorist in many years and the motive behind the attack. Going through the sentences given, we see that sentence (d) talks about the Saudi Arabia- Iran rivalry, which seems to be unrelated with other sentences. Hence sentence (d) is not a part of the paragraph so formed.

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REASONING ABILITY

Direction (1-5): Study the following information to answer the given questions:

Ten persons are sitting in twelve seats in two parallel rows containing five people each, in such a way that there is an equal distance between adjacent persons. In row 1, A, B, C, D and E are seated and all of them are facing south, and in row 2, P, Q, R, S and T are sitting and all of them are facing north. One seat is vacant in each row. Therefore, in the given seating arrangement each member seated in a row faces another member of the other row. All of them like a different colour i.e. Red, Green, Pink, Blue, Purple, White, Black, Grey, Violet and Yellow.

- S sits third to the right of R and likes Blue colour.
- Only two people sit between Q and Vacant seat.
- Q does not like Purple and Pink colour.
- E is not an immediate neighbour of C.
- B likes yellow colour. The one who likes Pink colour faces the one who likes Grey colour.
- The one who likes Pink colour sits opposite to the one, who sits third right of the one, who sits opposite to S.
- C is not an immediate neighbour of D.
- T, who likes neither Purple nor White colour, does not face vacant seat.
- Neither S nor R sits at an extreme ends. D faces R.
- Vacant seats are not opposite to each other.
- Two persons sit between C and B, who sits third right of the one, who likes Black colour.
- The one who likes Violet colour faces the one, who likes Blue colour.
- The person who likes Red colour and Grey colour are adjacent to each other.
- Vacant seat of row-1 is not an immediate neighbour of D.
- Q sits at one of the extreme ends.
- R does not like Red and Grey colour.
- Vacant seat of row-1 does not face S also does not sit at any of the extreme ends.

1. Who sits second to right of the one, who faces vacant seat of Row-2?
(a) S (b) B (c) T
(d) E (e) None of these

2. Which of the following colour does T like?
(a) Yellow (b) Green (c) Pink
(d) Grey (e) Red

3. E is related to vacant seat of row-1 in the same way as T is related to P. So, following the same pattern vacant seat of row-2 is related to which of the following?
(a) Q (b) D (c) R
(d) P (e) None of these

4. Who sits diagonally opposite to the one, who likes White colour?
(a) C (b) B (c) T
(d) E (e) None of these

5. Which of the following is true regarding P?
(a) P sits second to right of T.
(b) P is not an immediate neighbour of S.
(c) P sits third to left of R.
(d) P sits at one of the extreme ends of the line.
(e) P faces vacant seat of row-1.

6. **Statement:** A record of sort was created after the UP government, which advertised for 368 posts of peon in secretariat, got 23 lakh responses. The minimum qualification for the post of peon is that the applicant should be a class five pass out and know how to ride a bicycle. Grabbing the opportunity, opposition parties in unison attacked the SP-led state government over its promise of providing employment to youths in the state. Of the total 368 posts, 268 are for general category and the rest are for SC, ST and other reserved categories in the age group of 18 to 40 years. "When we categorized the applications viz. a viz. a qualification, we were surprised to find that 255 doctorates have applied for the job," a senior secretariat administration official said.

Arguments:
I. I. No, It will further aggravate the problem of educated unemployment.
II. II. Yes, It creates complexes among employees and affects the work adversely.
III. III. No, This goes against the basic rights of the individuals.
IV. IV. Yes, This will increase productivity.
V. Should people with educational qualification higher than the optimum requirements be debarred from seeking jobs?
(a) Only I and III are strong
(b) All are strong
(c) Only II and IV are strong
(d) Only III is strong
(e) None of these

7. **Statement:** There is little that is surprising about India's recent refusal to allow Google to launch its street view service, which gives users a 360-degree view of public spaces. The proposal was rejected following objections raised by the Defense Minister.
Which of the following objection(s) may not be a probable reason(s) for the above step taken by the government?
I. The decision is said to have come in the backdrop of the terror attack on the Pathankot airbase, with investigators suspecting that terrorists used Google maps to study the topography of the targeted area.
II. The concerns of the defense organizations should be taken into consideration.
III. India's security and stability should be given prime importance.
IV. We in India are not mature enough to permit such exploratory things threatening national security. We have more enemies inside than outside.
(a) Only II and III (b) All except III
(c) Only IV (d) Only I and IV
(e) None of these

Direction (8-12): Each of the questions below consists of a question and two statements numbered I and II given below it. You have to decide whether the data provided in the statements are sufficient to answer the question.

8. Six persons namely A, B, C, D, E and F teach one subject each, one after another viz., Reasoning, Quant, Banking, Computer, General awareness and English but not necessarily in the same order. Quant is not taught before Banking nor it is the last subject taught. Which subject is taught just after English?
I. The first subject to teach is English which is not be taught by either C or E. A, C and E are not available to teach the last subject.
II. Reasoning is taught by B just after Banking and just before Computer which is taught by D.
(a) If both the statements I and II taken together are not sufficient to answer the questions.
(b) If statement either I or II is sufficient to answer the question.
(c) If both the statements I and II taken together are sufficient to answer the questions.
(d) If statements I is sufficient to answer the question, but statement II by itself is not sufficient to answer the question.
(e) If statement II by itself is sufficient to answer the question, but statement I alone is not sufficient to answer the question.

9. Eight friends Sunil, Ravi, Jayant, Kapil, Naren, Shivam, Paresh and Lakshya are seated in a straight line facing north, but not necessarily in the same order.
Ravi sits second to right of Shivam. Shivam sits at one of the extreme ends of the line, then what is the position of Kapil?
I. Paresh is not an immediate neighbor of Naren or Jayant, and sits third to the left of Kapil.
II. Only two persons sit between Kapil and Sunil.
(a) If both the statements I and II taken together are not sufficient to answer the questions.
(b) If statement II by itself is sufficient to answer the question, but statement I alone is not sufficient to answer the question.
(c) If statement either I or II is sufficient to answer the question.
(d) If statements I is sufficient to answer the question, but statement II by itself is not sufficient to answer the question.
(e) If both the statements I and II taken together are sufficient to answer the questions.

10. Eight friends A, B, C, D, E, F, G and H are sitting in a circle, but not necessarily in the same order. Four of them are facing outside and four of them are facing the centre. E faces outside. Both the immediate neighbours of E face the centre. H sits second to the right of E. B sits third to the left of E. How many people are seated between A and C (counting clockwise from A)?
I. G sits second to the left of A. B sits third to the right of H and D is not an immediate neighbor of B.
II. F is an immediate neighbor of D. C is an immediate neighbor of G.
(a) If both the statements I and II taken together are not sufficient to answer the questions.
(b) If statement either I or II is sufficient to answer the question.
(c) If both the statements I and II taken together are sufficient to answer the questions.
(d) If statements I is sufficient to answer the question, but statement II by itself is not sufficient to answer the question.
(e) If statement II by itself is sufficient to answer the question, but statement I alone is not sufficient to answer the question.

11. Ten persons are sitting in two parallel rows containing five persons each in such a way that there is an equal distance between adjacent persons. In the first row, P, Q, R, S and T are seated and all of them are facing south. In the 2nd row, A, B, C, D and E are seated and all of them are facing north. Therefore, in the given seating arrangement, each member seated in a row faces another member of the other row. Who amongst the following are sitting exactly in the middle of the rows?
I. D sits third to the left of A. P faces an immediate neighbor of D. R sits second to the right of P and E sits immediate right of D.
II. Only one person sits between Q and S. B and E are immediate neighbours.
(a) If statement either I or II is sufficient to answer the question.

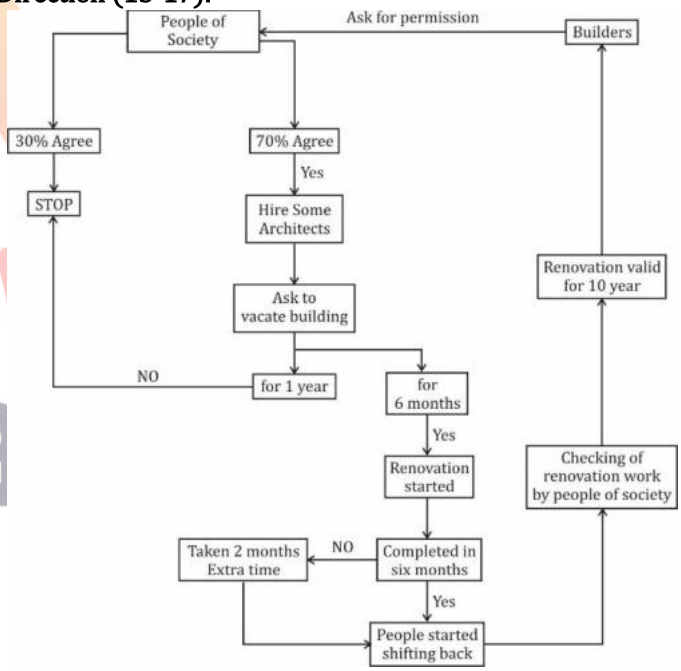
(b) If statement II by itself is sufficient to answer the question, but statement I alone is not sufficient to answer the question.
(c) If both the statements I and II taken together are not sufficient to answer the questions.
(d) If statements I is sufficient to answer the question, but statement II by itself is not sufficient to answer the question.
(e) If both the statements I and II taken together are sufficient to answer the questions.

12. Six students P, Q, R, S T and V are the top six rankers of the class. No two persons got the same rank. The student who got the highest marks is given rank 1 and the student who got the least marks is given rank 6.who got the 6th rank?
I. Q got less marks than both R and U. P got more marks than T but less than S.
II. Q got the second least rank and U got the second highest rank, R got less marks than P.
(a) If both the statements I and II taken together are not sufficient to answer the questions.
(b) If statement either I or II is sufficient to answer the question.
(c) If both the statements I and II taken together are sufficient to answer the questions.
(d) If statements I is sufficient to answer the question, but statement II by itself is not sufficient to answer the question.
(e) If statement II by itself is sufficient to answer the question, but statement I alone is not sufficient to answer the question.

13. Statement: There are two construction companies namely X and Y for the construction of the central mall. Construction Company X has offering 24x7 Wi-Fi service, 24x7 power and water service, guarantee of each room for one year in the mall and even an insurance scheme. But the owner has provided sponsorship to Company Y.
What is/are the reason(s) behind this decision of the owner?
(i) Company has provided an insurance scheme of 10 years.
(ii) Company has provided guarantee of one and half year for each room.
(iii) Company Y has provided 24x7 power and water service at the same cost.
(a) All of the above (b) Only (ii) and (iii)
(c) Only (i) and (ii) (d) Only (ii)
(e) None of these

14. Statement: However, the market participants are eagerly waiting for a possible change in GDP growth forecast, inflation target for FY 17, along with the RBI's commentary on foreign exchange reserves as around $30 billion of foreign currency non-resident bank deposits are maturing in September.
In its April review, the RBI had slashed the repo rate, the rate at which banks borrow from the central bank, by 0.25 percent to 6.50 percent, to a more than five-year low. Since January 2015, the RBI has cut its repo rate by 150 basis points or 1.5 percent.
Which of the following negates the above steps taken by the RBI?
(a) The Consumer Price Index (CPI), which is closely watched by the RBI in order to set interest rate policy, jumped to 5.39 percent in April vs 4.83 percent in March.
(b) Global Crude Prices hitting a 12-year low of below $27 dollars a barrel in January 2016 made a strong case for rate cuts for RBI.
(c) Loans and EMI will become cheaper for retail loans.
(d) Rupee will strengthen against other currencies.
(e) None of these.

Direction (15-17):



Builder X has decided to renovate sundervan society .So, different conditions are given in Data flow diagram. So after analyzing above DFD diagram you have to answer the given questions:

15. After /Before which step Builder should have taken legal permission from concerned authority for renovation work?
(a) After hiring required architects.
(b) Before asking people of society to vacate their house.
(c) After taking permission from people of society.
(d) After asking people of society to vacate their house.
(e) cannot be determined.

16. Which condition is sufficient to make sure that renovation work will be completed in 6 months?
(a) Concerned authority are regularly visiting to renovation site for cross check of work.
(b) Builders are planning to make renovation make valid for 15 years.
(c) Data insufficient.
(d) People of society have given ultimatum to builders to complete renovation in six months otherwise they will go on hunger strike.
(e) None of these.

17. Which step of renovation is logically missing in Data flow diagram?
(a) If only 30% people gets agree for renovation then Builders should again try to convince people.
(b) Builders should take legal permission from concerned authority for renovation.
(c) To complete renovation Builder should take 3-4 time duration slot.
(d) Before vacating house people should take suggestions from their relatives.
(e) None of these.

18. Study the following information carefully and answer the questions which follow
A person X given an exam for the post of Branch manager in a Bank. Candidates must possess the following criteria. The candidate must—
(i) Not less than 35 years and not exceed 40 years as on 01.11.2015.
(ii) Have a Bachelor's Degree in any discipline with 65 per cent marks.
(iii) Have a MBA in Banking and finance.
(iv) Have experience of at least 4 years in a reputed bank as on 01.12.2016.
(v) Relaxation in age of 3 year if candidate is a female.
Study the following information and give the correct sequence from which we can find the exact answer with minimum number of conditions?
(A) As on 01.11.2016, X's age is 38 year old.
(B) X has a degree in Engineering and Technology with 72 per cent marks.
(C) Its definite information that X is a Female.
(D) X have Post graduation in MBA with Banking and finance stream.
(E) X is currently working in Axis bank from 15.07.2012.
(a) BECAD (b) ABCDE (c) ABDEC
(d) ABECD (e) None of these.

Direction (19-21): Study the following information carefully and answer the questions which follow—
In a certain code language, some statements are coded as follow:
'Visual effects of colour' is coded as 'C11 F73 T86 K93'
'Visual for one's eye' is coded as 'T86 L23 N27 M18'
'Retinal detachment curtain effects' is coded as 'B15 K93 G14 S21'
'Areas for vision development' is coded as ' A10 H32 Y16 L23'.

19. Which among the following option can be used for getting the code of 'eye'?
(i) L23 T86 Y16 H32 (ii) N27 M18 L23 A10
(iii) F73 M18 L23 G14 (iv) S21 B15 T86 N27
(v) None of these
(a) Only (i) and (ii) (b) only (ii) and (iii)
(c) Only (iii) and (iv) (d) Only (iv) and (v)
(e) Only (ii) and (iv)

20. Which among the following option cannot be used for getting the code of 'development'?
(a) H32 F73 G14 S21 (b) K93 H32 Y16 B15
(c) Y16 M18 C11 N27 (d) A10 B15 T86 S21
(e) None of these

21. If 'Retinal' can be coded as B15, then which among the following option can be used for getting the code of 'detachment' ?
(a) B15 G14 S21 H32 (b) L23 S21 B15 G14
(c) C11 G14 Y16 S21 (d) Y16 G14 N27 B15
(e) None of these

Direction (22-26): Study the following information to answer the given questions:
Seven persons namely P, Q, R, S, T, U, V not in the same order in a organization working as a AM(Assistant Manager), MG(Manager), DGM(Deputy General Manager), GM (General Manager), CGM (Chief General Manager), ED(Executive Director), CEO(Chief Executive Officer). And likes different cities namely Mumbai, Jaipur, Ranchi, Chandigarh, Agra, Patna, Bhopal not in same order.
NOTE: position has been increasing order of their experience. CEO is most experienced person and Assistant manager least experienced.
- R is junior to only two persons. S does not like Ranchi.
- Person who likes Chandigarh is junior to T but not a least junior.
- Person who likes Patna is senior to ED.
- Person who likes Ranchi senior to U but junior to T.
- T is junior to CGM but senior to V.
- U junior to V and likes Agra.
- Q is senior to T but not a most senior.
- CGM does not like Bhopal.
- V is junior to P but not to S.
- CGM is senior to one who likes Jaipur

22. Which of the following post is preferred by T?
(a) CEO (b) GM (c) AM
(d) ED (e) DGM

23. How many person sit between R and CEO?
(a) Three (b) Five (c) Two
(d) One (e) None of these

24. If Q related to GM in the same way as T related to MG. Which of the following is P related to, following the same pattern?
(a) CGM (b) DGM (c) AM
(d) CEO (e) None of these

25. ED is going which of the following city?
(a) Mumbai (b) Agra (c) Ranchi
(d) Bhopal (e) Patna

26. Four of the following five are alike in a certain way and hence they form a group. Which one of the following does not belong to that group?
(a) CEO (b) CGM (c) DGM
(d) ED (e) AM

Direction (27-31): In every question two rows are given and to find out the resultant of a particular row you need to follow the following steps: -
Step 1: If an even number is followed by an odd (prime) number then the resultant will be the addition of both the numbers.
Step 2: If an odd number is followed by a perfect square then the resultant will be the subtraction of the square number from the odd number.
Step 3: If an odd number is followed by another odd number then the resultant will be the addition of both the numbers.
Step 4: If an even number is followed by an odd (non-prime) number then the resultant will be the subtraction of the odd number from the even number.
Step 5: If an odd number is followed by an even number then the resultant comes by multiplying the numbers.

27. 4 5 2
13 9 3
Find the sum of two rows
(a) 18 (b) 25 (c) 11
(d) 14 (e) None of the above

28. Find the resultant of second row if X is the resultant of first row.
11 9 7
17 X 3
(a) 11 (b) 13 (c) 10
(d) 9 (e)None of the above

29. If the sum of the resultants of two rows is 20. Then find the value of X.
18 15 6
8 3 X
(a) 3 (b) 9 (c) 2
(d) 5 (e)None of the above

30. Find the difference between the resultant of first and second row.
5 4 15
21 16 4
(a) 25 (b) 20 (c) 10
(d) 15 (e)None of the above

31. Find the sum of the resultant of two rows. If X is the resultant of second row.
X 5 16
43 36 2
(a) 11 (b) 17 (c) 13
(d) 15 (e)None of the above

32. Mohit is going in a company for the interview. For passing the interview, he has to clear three round i.e. written test, Group discussion and Physiological test, then only he will be eligible for the Job. In the first round of written test if he got 85% then only he will be eligible for the second and third round, otherwise he will not be selected. After passing in the first round, he can eligible for Group discussion and Physiological test rounds. It is compulsory to get 30 percent as mean percentage in the other two rounds. If he does not get that percentage, then he will be disqualified. Some other conditions are given for clearing all rounds.
(A) Mohit is 25 year old on 01-02-2016 and he got 82% in written test.
(B) Mohit has completed his graduation at the age of 22 years.
(C) Mohit got 90% in written test and got 40 mean percent in both other rounds.
(D) After completing his graduation, in the interview Mohit got 95% in written test also got 28 mean percent of Group discussion and Physiological test rounds.
If Mohit fulfills all these criteria then from which of the following point it can be concluded that he is not selected for the Job?
(a) Only A (b) Only B (c) Only A and D
(d) Only C (e) Only A, B and D

Direction (33-35): Study the following information carefully and answer the questions given below it:
Five family members P, Q, R, S and T are sitting in a row facing north. P is sitting third to the right of his daughter. Q is sitting next to R, whose husband is the brother of Q. P is sitting next to T.S is not sitting with P's son. S is sitting on the left end and the mother of S is R, who is the wife of P. Q is sitting on the right of R and S.Q and P are sitting together.

33. What is the position of son of R with respect to the father of S in the given seating arrangement?
(a) Immediate left (b) immediate right
(c) third to the right (d) Second to the left
(e) none of these

34. How is the daughter of P is related to Q among the family members?
(a) Niece (b) Sister-in-law (c) Wife
(d) Sister (e) none of these

35. If the position of Q and T are interchanged, then who among the following does sit immediate right of S's mother?
(a) Brother of P (b) P (c) Son of P
(d) R (e) Wife of P

Direction (36-37): In the following questions, the symbols $, %, @, © and ✳ are used with the following meaning as illustrated below.
'P%Q' means 'P is neither greater than nor smaller than Q'
'P$Q' means 'P is neither smaller than nor equal to Q'
'P©Q' means 'P is neither greater than nor equal to Q'
'P✳Q' means 'P is not greater then Q'
'P@Q' means 'P is not smaller than Q'

36. In which of the following expression does not lead to, 'P @ Q' and 'M © L' being definitely true?
(a) P @ R @Q © M * N $ L
(b) P @ R @ Q % M © N © L
(c) P © R @ Q % M * N * L
(d) P @ R % Q * M % N © L
(e) P % R @ Q % M © N © L

37. Which of the following symbols should be placed in the blank spaces respectively (in the same order from left to right) in order to complete the given expression in such a manner that makes the expression H © J $ G and E @ F True?
F % G * E _ J $ I % H
(a)* (b) © (c) @
(d)$ (e) %

38. The question given below consists of a statement, followed by three arguments numbered I, II and III. You have to decide which of the arguments is/are 'strong' (arguments) and which is/are 'weak' (arguments) and accordingly choose your answer from the alternatives given below each question.
Statement: Sociologists and political observers are of the opinion that making education qualification mandatory for election candidates would be discriminatory since that would naturally deprive citizens of India the right to represent their people. Institutional qualification, as they say, is different from political acumen and wisdom. In a country like India where about a quarter of 815 million eligible voters are illiterate, it would not be prudent to deny a politically aware and socially conscious individual the election ticket just because he/she doesn't have a minimum qualification.
Should "literacy" be the minimum criterion for becoming a voter in India?
Arguments:
I. I. No, Mere literacy is no guarantee of political maturity of an individual.
II. Yes, Illiterate people are less likely to make politically wiser decisions of voting for a right candidate or party.
III. No, Voting is the constitutional right of every citizen.
(a) None is strong
(b) Only I and II are strong
(c) Only III is strong
(d) Only II and III are strong
(e) All are strong

39. Statement: Reinforcing its commitment to green initiatives, railways will explore its future course of action to prevent pollution. Issues related to environment like solid waste management, pollution control, water management and energy management will be discussed at a workshop on 'Environmental challenges before Indian Railways and solutions'.
I. Introduction of bio-fuel and solar energy in train operation.
II. Installation of rain water harvesting facilities at major stations.
III. Waste water recycling plant is also being planned in which recycled water will be used for washing and horticulture purpose.
IV. Initiatives such as LED light fittings to reduce power consumption and use of five percent bio-diesel in diesel locos.
V. Introduction of water audit to assess consumption and wastage at major stations.
Which of the following points will strengthen the decision taken by the Railways?
(a) All of the above (b) All except I
(c) All except I and V (d) All except V
(e) None of these

Direction (40-42): Study the following information carefully and answer the given questions.
A word and number arrangement machine when given an input line of words and numbers rearranges them following a particular rule in each step. The following is an illustration of input and rearrangement.
Input: 23 56 price 59 terrific 72 unit situation 86 information
Step I: 88 informatioish 23 56 price 59 terrific 72 unit situation
Step II: pricish 74 88 informatioish 23 56 59 terrific unit situation
Step III: 57 situatioish pricish 74 88 informatioish 23 56 terrifiish unit
Step IV: terrifiish 58 57 situatioish pricish 74 88 informatioish 23 unit

Step V : 21 uniish terrifiish 58 57 situatioish pricish 74 88 informatioish

Step V is the last step of the above **arrangement.**

As per the rules followed in the steps given above, find out in each of the following questions the appropriate step for the given input.

Input : 22 39 since 12 growth sector 76 future demand 25

40. Which step number would be the following output?
futurish 37 78 demanish 22 since 12 sector growth 25
(a) Step IV (b) Step V (c) Step VI
(d) Step VII (e) There will be no such step

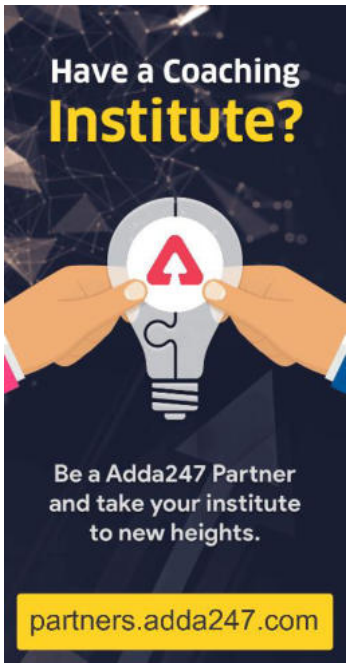
41. How many elements (words or numbers) are there between 'futurish' and '24' as they appear in the last step of the output?
(a) One (b) Three (c) Four
(d) Five (e) None of these

42. What is sum of the numbers which is second from the right and fourth from the left in the third step?
(a) 37 (b) 39 (c) 33
(d) 49 (e) None of these

43. **Statement:** The government is set to overhaul annual targets for public sector lenders, ending a focus on size that has long encouraged banks to inflate their loans and deposits at the year-end to hit growth objectives. Banking and government sources said that the new targets, to be discussed at meeting with top state bank officials, would focus on efficiency, with objectives set around return on assets, or return on equity, and controlling bad debts.
Which of the following points can be **inferred** from the given information?
(a) Loans and deposits of the banks will go up.
(b) Some short term loans will be discouraged by the banks.
(c) Credit ratings of the banks will be boosted up.
(d) Financial stability of the banks will be lost.
(e) All can be inferred.

44. **Statement:** Google, which dominates much of life on the Internet, has been trying to expand beyond computers and telephones to living rooms, cars and bodies. It made its way a bit further into people's homes when it agreed to pay $3.2 billion in cash for Nest Labs, which makes Internet-connected devices like thermostats and smoke alarms. But it has agreed that Nest's privacy policies are going to be well-respected. For Google, gaining visibility into people's habits beyond computers and phones — whether watching television using Chrome cast, taking a walk wearing Google Glass or managing their homes using Nest products — will provide a fuller picture of users.
Which of the following arguments would most **weaken** Nest's beliefs?
(a) Google products can easily be integrated into Nest.
(b) Unlike many of Silicon Valley's most popular companies that make software that costs very little to build, Nest is capital-intensive because it builds hardware.
(c) To follow the terms and condition, Google make some changes in Nest's privacy policies.
(d) The deal between two companies has not yet closed.
(e) None of these.

45. **Statement:** By fixing a deadline of one year from the date of framing of charges for the completion of trial involving the members of parliament and legislative assemblies, the Supreme Court has once again intervened effectively to give some credibility to the idea of cleaning the polity. It gave a jolt to the political class by striking down a provision that protected sitting legislators from immediate disqualification on conviction.
Which of the following can be concluded from the above statement?
(a) To implement the guidelines, the government must set up more speedy trial courts, which will help them deliver justice in time.
(b) The steps taken by the apex court will help choose the best people from their constituency and make the Indian democratic system free from criminalization.
(c) This will help in reducing the scourge of criminalization of politics.
(d) The latest order will help address this problem by empowering the trial court to refuse routine adjournments.
(e) None of these.



QUANTITATIVE APTITUDE

Direction (46-47): In a bag there are three types of colored balls of red, white and Blue colors. The probability of selecting one red ball out of the total balls is $\frac{1}{2}$ and the probability of selecting one blue ball out of the total balls is $\frac{2}{7}$.The number of white balls in the bag is 6.

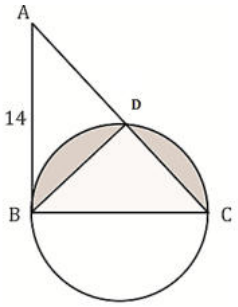
46. If all the ball are numbered starting from 1, 2, 3, ……and so on then what is the probability of selecting one ball which is numbered as a multiple of 3 or 7 out of the total balls.

(a) $\frac{3}{7}$ (b)$\frac{5}{14}$ (c)$\frac{1}{12}$
(d)$\frac{6}{11}$ (e) none of these

47. What are the total number of balls in the bag?

(a) 40 (b) 30 (c) 35
(d) 28 (e) none of these

48. Given that D is the midpoint of AC and BC is diameter of circle, and circumference of circle is 44cm.
quantity1- area of shaded region
quantity2- $7\pi\ cm^2$



(a)quantity $I >$ $quantityII$
(b)quantity $I <$ $quantityII$
(c) $quantityI \geq quantityII$
(d) $quantityI \leq quantityII$
(e)quantity I=quantity II or No relation

49. Quantity I $= 18x^3\ y^3$, $Quantity\ II = 12\ x^4y^4$, $if\ x > 0\ \&\ y < 0$

(a) Quantity I >Quntity II
(b) Quantity I < Quantity II
(c) Quantity I ≤ Quantity II
(d) Quantity I=quantity II or No relation
(e) Quantity I ≥ Quantity II

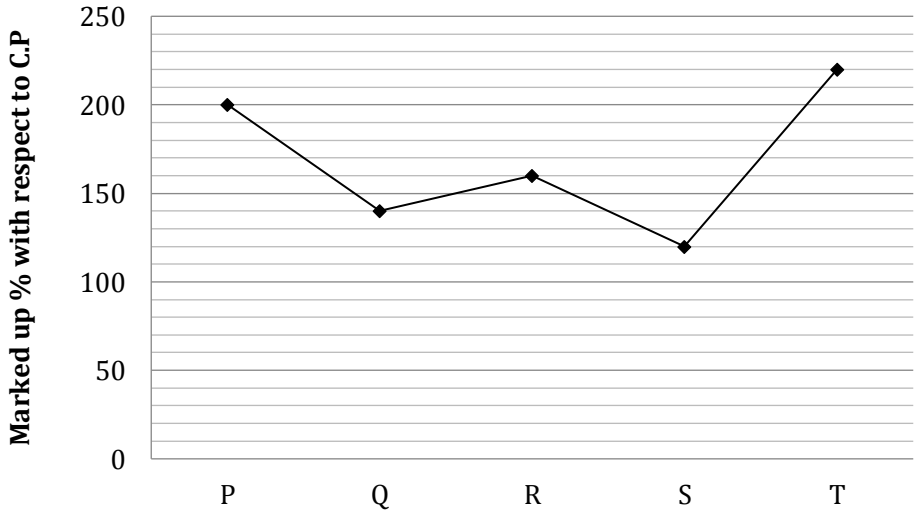
50. Speed of a boat in still water and speed of current is in ratio 6 : 1. If the difference between distance covered by boat in 2 hours upstream and in 2 hours downstream is 8 km.

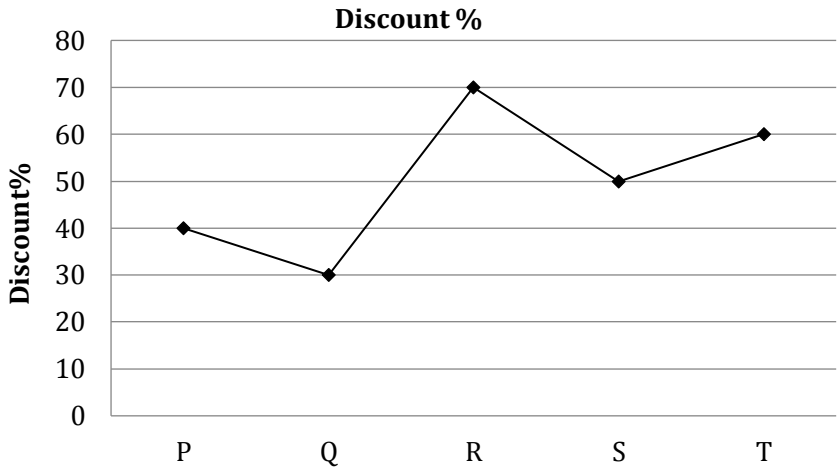
Quantity-1- Speed of boat in still water

Quantity-2- speed of cyclist who goes 28 km in 2 hrs.

(a) $quantity1 > quantity2$
(b) $quantity1 \geq quantity2$
(c)$quantity1 < quantity2$
(d) $quantity1 \leq quantity2$
(e) $quanity1 = quantity2$

Directions (51-55): In the following line graphs, first line graph shows the percent marked up price with respect to the cost price of the products and the second line graph shows the discount percentage given on the marked up price with the help of the given information answer the following questions.





51. If the cost price of the product P and R is equal then the selling price of product P is how much % more than the selling price of product R.
(a)50% (b)450% (c)250%
(d)200% (e) 150%

52. If the cost price of product R is increased by 10% and other prices(marked price /S.P) remain same, then how much more percent loss will be there as compared to previous loss ?(approximately)
(a)4.36% (b)7.36% (c)8.36%
(d)9.36% (e)10.36%

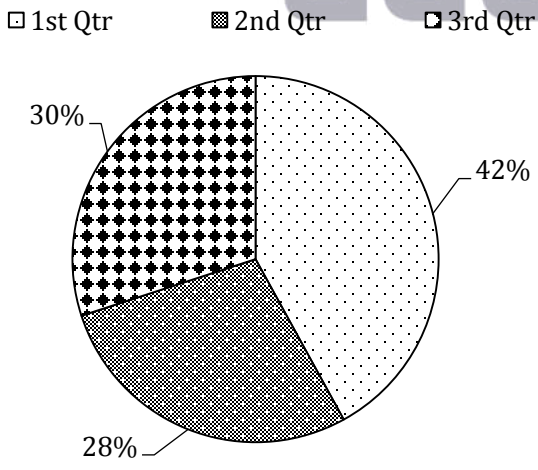
53. If selling price of Q and T are equal, then find the ratio of cost price of T to the cost price of Q.
(a) 49 : 44 (b) 46 : 49 (c) 39 : 47
(d) 47 : 39 (e) None of these

54. Which of the following product have the highest profit or loss percentage?
(a) P (b) Q (c) R
(d) S (e) T

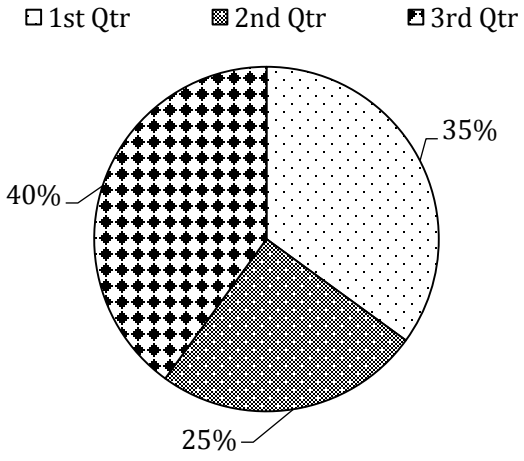
55. If marked price of all the items is same, then which of the following item would have second highest cost price?
(a) P (b) T (c) R
(d) S (e) Q

Directions (56-60)- In the given pie chart, in a state there are two types of tourist, Domestic and international tourist. Graph shows the percentage wise breakup of these tourists in a given year. There are 4 quarters in a year and graph shows the information for three quarters.

Domestic tourist (3000)



International tourist(1800)



56. If we include the 4th quarter of the year, percentage of domestic tourist in 3rd quarter will become 25% of the total domestic tourist of the year. Then what is the number of domestic tourist in 4th quarter?
(a) 1600 (b) 750 (c) 900
(d) 600 (e) None of these

57. If the international tourists visited in IVth quarter is 150 more than the international tourist visited in IInd quarter. Then international tourists visited in 4th quarter is what percent of total number of international tourists.
(a) 25% (b) 35% (c) 45%
(d) 50% (e) None of these

58. Total no of domestic tourist who visited in 2nd and 3rd quarter is what percent of total no. of the international tourist in 2nd and 3rd quarter? (approximately)
(a) 139% (b) 159% (c) 149%
(d) 169% (e) 179%

59. Average number of domestic tourist from 1st and 2nd quarter is how much percent more than the number of international tourist from 1st quarter?
(a) 6.67% (b) 75% (c) 80%
(d) 66.67% (e) 90%

60. If the total number of international tourist in next year increases by 25% while the number of international tourist of 1st quarter increase by $28\frac{4}{7}\%$. Then find the new percentage of international tourists of 1st quarter over total international tourist in the new year. (Given that no tourist visited in fourth quarter.)
(a) 30% (b) 35% (c) 36%
(d) 40% (e) None of these

Directions (61-62): Ritu's expense out of her total expenditure in a trip is in between travel expenses, Accommodation expenses and shopping expenses are in the ratio of 5 : 4 : 3. Out of the travel expenses he spent 25% on bus tickets, 60% on air tickets and remaining travel expenses are saved. All of the accommodation expenses are spent on hotels. And out of the total expenses on shopping expenses 50% spent on tax free products, $47\frac{2}{9}\%$ spent on footpath shopping and remaining are saved.
The total amount saved is 17500.

61. From the above information, what is the total amount on accommodation expense?
(a) Rs75000 (b) Rs44000 (c) Rs90000
(d) Rs95000 (e) Rs84000

62. Ritu's total amount on the trip is.
(a) Rs242000 (b) Rs252000 (c) Rs262000
(d) Rs275000 (e) none of these

Directions (63-67): Given below is the percentage distribution of number of students from 5 different colleges attended different number of seminars.

	No. of seminars Attended - 1	No. of seminars Attended - 2	No. of seminars Attended - 3	No. of seminars Attended - 4	No. of seminars Attended - 5	No. of seminars Attended - 6
P	20	15	24	8	—	15
Q	—	16	25	—	—	18
R	12	20	25	—	—	—
S	—	—	25	15	22	12
T	15	—	24	—	32	5

63. If the number of students from college R who attended at most 3 seminars is equal to number of students from college S who attended at least 3 seminars and the total number of students from College S is 11400. Then find the number of students from college R who attended 3 seminars.
(a) 3700 (b) 4100 (c) 4500
(d) 4800 (e) None of these

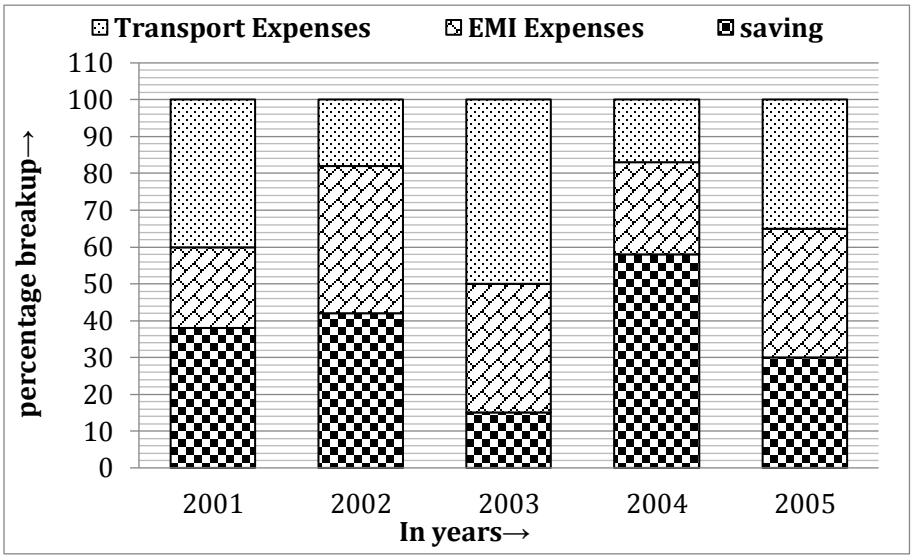
64. Total no. of students from college P who attended atmost 2 seminars is equal to the sum of number of students from college T who attended 1 seminar and the number of students from the same college who attended 6 seminars. Then the total number of students from college P is what percent of total no. of student from college T ?
(a) $17\frac{1}{7}\%$ (b) 45% (c)49%
(d) $57\frac{1}{7}\%$ (e) none of these

65. The number of students from college P who attended more than 2 seminars is approximate what percent less than the number of students from college S who attended at least 3 seminars if the number of student who attended 2 seminars from college P is 48. And the number of students of college S who attended 6 seminars is 14 more than the number of students from college P, who attended 1 seminar?
(a) 52% (b) 44% (c) 60%
(d) 48% (e) 57%

66. If the difference between number of students from college T who attended 3 seminars and students who attended 5 seminars is 22, and the total students from college R is 60% of the total students from college T then find the number of students of college R who are attending 2 seminars.
(a) 32 (b)35 (c)33
(d) 38 (e) none of these

67. If the ratio between the no. of students who attended 1 seminar and the no. of students who attend 2 seminars from college S is 9 : 4, and the difference between the same is 35 Then find the persons from this college who attended at most 4 seminars.
(a) 237 (b) 234 (c) 231
(d) 240 (e) None of these

Directions (68-72): The following bar graph shows the percentage break-up of a person's salary from year 2001 to 2005. With the given information, answer the following questions.



68. If the ratio on saving in the year 2002 and 2005 are in the ratio 7 : 5. Then what is the ratio of EMI expenses in the year 2002 and 2005.
(a) 6:7 (b) 8:9 (c) 9:8
(d) can't determined (e) 8:7

69. If the saving in 2002 is $\frac{3}{5}$th of the saving in 2004. Then what is the total expenditure spent on transport in 2002. (Given that total salary in 2004 is Rs. 1,75,000 Rs.)
(a) 31100 Rs. (b) 26100 Rs. (c)21100 Rs.
(d) 15100 Rs. (e) none of these

70. In every year there is an increase of 100% in monthly salary as compared to previous year's monthly salary then what is the ratio of monthly salary in 2005 to the expenses on transport in 2003.
(a) 8:1 (b) 1:8 (c)4:1
(d) 1:4 (e) none of these

71. In which year the ratio of EMI expanses to saving is 3rd highest?
(a) 2001 (b) 2004 (c) 2003
(d) 2002 (e) Cant be determined

72. Find the average percentage of transport expanses over the years.
(a) 32% (b) 34% (c) 35%
(d) 36% (e) None of these

Direction (73-75) 24 men can do a work in X days and 32 women can do the same work in (X + 8) days. The ratio of work done by 15 men and 12 women in the same time is 3 : 1.

73. Find the value of X ?
(a) 8 (b)9 (c) 12
(d) 11 (e) 10

74. 10 men and 24 women works for 6 days on the same work and the remaining work is done by 18 boys in 18 days. Then find the number of days in which 12 boys completed the whole work.
(a) 45 (b)48 (c) 54
(d) 58 (e)None of the above

75. The no. of days taken by 1 man to complete the same work is less than by the no. of days taken by 1 women to do this work, by :-
(a) 340 days (b) 325 days (c) 324 days
(d) 320 days (e) None of these

Directions (76-80): The following questions are accompanied by three statements A, B and C or I, II and III. You have to determine which statement(s) is/are necessary/sufficient to answer the question.

76. In how many days men and women can do the work when working together?
A. The ratio between the efficiency of men and women is 3 : 1.
B. Men and child can do $\frac{1}{3}$rd work in 9 days.
C. Women can do $\frac{2}{3}$rd of the work in 14 days.
(a) Only A and C together
(b) any 2 of the three statements
(c) C and either A or B.
(d) Question can't be answered even after using all the statements
(e) All statements are required

77. What will be the share of R in the profit earned by V, R and A together?
I. They together earned a profit of Rs. 54000 for a period of 1 yr.
II. R's investment was 25% less than V's and 50% more than A's.
III. The profit of V is Rs. 4000 more than that of A.

(a) Only I and II together
(b) II and either I or III only
(c) Only II
(d) Only II and III together
(e) None of these

78. A boat takes 2 hours to travel from point A to B in still water. To find out the speed upstream, which of the following information is/are required?
A. Distance between point A and B.
B. Time taken to travel downstream from B to A.
C. Speed of the stream of water.
(a) All are required
(b) Any one pair of A and B, B and C or C and A is sufficient.
(c) Only A and B
(d) Only A and C
(e) None of these

79. What is the cost of flooring a rectangular hall?
I. The length and the breadth of the hall are in the ratio 3 : 2.
II. The length of the hall is 48 m and the cost of flooring is Rs. 850 per sq m.
III. The perimeter of the hall is 160 m and the cost of flooring is Rs. 850 per sq m.
(a) Only I and II (b) Only I and III
(c) Only III (d) Any two of the three
(e) None of these

80. Find the two-digit number.
I. The sum of the squares of the two digits is 26.
II. The ratio between the two-digit number and the sum of the digit of that number is 5:2.
III. The digit in ten's place is 4 less than the digit in unit place.
(a) Any one of them
(b) Only I and II together are sufficient
(c) Only I and III are sufficient
(d) Any two of the three together are sufficient
(e) None of the above

ENGLISH LANGUAGE

Directions (81-88): Read the following passage carefully and answer the questions given below it. Certain words are given in bold to help you locate them while answering some of the questions.

Until recently, scientists did not know of a close vertebrate analogue to the extreme form of generosity observed in eusocial insects like ants and bees, whereby individuals cooperate, sometimes even sacrificing their own opportunities to survive and reproduce, for the good of others. However, such a vertebrate society may exist among underground colonies of the highly social rodent Heterocephalus glaber, the naked mole rat.

A naked mole rat colony, like a beehive, wasp's nest, or termite mound, is ruled by its queen, or reproducing female. Other adult female mole rats neither ovulate nor breed. The queen is the largest member of the colony, and she maintains her breeding status through a mixture of behavioral and, presumably, chemical control. Queens have been long-lived in captivity, and when they die or are removed from a colony one sees violent fighting for breeding status among the larger remaining females, leading to a takeover by a new queen.

Eusocial insect societies have rigid caste systems, each insect's role being defined by its behavior, body shape, and physiology. In naked mole rat societies, on the other hand, differences in behavior are related primarily to reproductive status (reproduction being limited to the queen and a few males), body size, and perhaps age. Smaller non-breeding members, both male and female, seem to participate primarily in gathering food, transporting nest material, and tunneling. Larger non-breeders are active in defending the colony and perhaps in removing dirt from the tunnels. Jarvis' work has suggested that differences in growth rates may influence the length of time that an individual performs a task, regardless of its age.

Cooperative breeding has evolved many times in vertebrates, but unlike naked mole rats, most cooperatively breeding vertebrates (except the wild dog, Lycaon pictus) are dominated by a pair of breeders rather than by a single breeding female. The division of labor within social groups is less **pronounced** among other vertebrates than among naked mole rats, colony size is much smaller, and mating by **subordinate** females may not be totally **suppressed**, whereas in naked mole rat colonies subordinate females are not sexually active, and many never breed.

81. Which of the following most accurately states the main idea of the passage?
(a) Naked mole rat colonies are the only known examples of cooperatively breeding vertebrate societies.
(b) Naked mole rat colonies exhibit social organization based on a rigid caste system.
(c) Behavior in naked mole rat colonies may well be a close vertebrate analogue to behavior in eusocial insect societies.
(d) The mating habits of naked mole rats differ from those of any other vertebrate species.
(e) The basis for the division of labor among naked mole rats is the same as that among eusocial insects.

82. The passage suggests that Jarvis'work has called into question which of the following explanatory variables for naked mole rat behavior?
(a) Size (b) Age
(c) Reproductive status (d) Rate of growth
(e) Previously exhibited behavior

83. It can be inferred from the passage that the performance of tasks in naked mole rat colonies differs from task performance in eusocial insect societies in which of the following ways?
(a) In naked mole rat colonies, all tasks are performed cooperatively.
(b) In naked mole rat colonies, the performance of tasks is less rigidly determined by body shape.
(c) In naked mole rat colonies, breeding is limited to the largest animals.
(d) In eusocial insect societies, reproduction is limited to a single female.
(e) In eusocial insect societies, the distribution of tasks is based on body size.

84. The passage supports which of the following inferences about breeding among Lycaon pictus?
(a) The largest female in the social group does not maintain reproductive status by means of behavioral control.
(b) An individual's ability to breed is related primarily to its rate of growth.
(c) Breeding is the only task performed by the breeding female.
(d) Breeding in the social group is not cooperative.
(e) Breeding is not dominated by a single pair of dogs.

85. According to the passage, naked mole rat colonies may differ from all other known vertebrate groups in which of the following ways?
(a) Naked mole rats exhibit an extreme form of altruism.
(b) Naked mole rats are cooperative breeders.
(c) Among naked mole rats, many males are permitted to breed with a single dominant female.
(d) Among naked mole rats, different tasks are performed at different times in an individual's life.
(e) Among naked mole rats, fighting results in the selection of a breeding female.

Directions (86-87): Choose the word/group of words which is **most similar** in meaning to the word/group of words printed in bold as used in the passage.

86. Suppress
(a) Reticent (b) Proscribe (c) Subdue
(d) Ostracize (e) Preposterous

87. Subordinate
(a) Appendage (b) Adjunct (c) Patron
(d) Adjutant (e) Indigent

Directions (88): Choose the word/group of words which is most **opposite** in meaning to the word/group of words printed in bold as used in passage.

88. Pronounce
(a) Enunciate (b) Adjudicate (c) Enshroud
(d) Opine (e) Interpose

Directions (89-95): Read the following passage carefully and answer the questions given below it. Certain words are given in bold to help you locate them while answering some of the questions.

In the summer of 1856, Nathaniel Hawthorne visited a decaying English manor house known as Stanton Harcourt, not far from Oxford. He was struck by the vast kitchen, which occupied the bottom of a 70-foot tower. "Here, no doubt, they were accustomed to roast oxen whole, with as little fuss and ado as a modern cook would roast a fowl," he wrote in an 1863 travelogue, Our Old Home.

Hawthorne wrote that as he stood in that kitchen, he was seized by an uncanny feeling: "I was haunted and **perplexed** by an idea that somewhere or other I had seen just this strange spectacle before. The height, the blackness, the dismal void, before my eyes, seemed as familiar as the decorous neatness of my grandmother's kitchen." He was certain that he had never actually seen this room or anything like it. And yet for a moment he was caught in what he described as "that odd state of mind wherein we fitfully and teasingly remember some previous scene or incident, of which the one now passing appears to be but the echo and reduplication."

When Hawthorne wrote that passage there was no common term for such an experience. But by the end of the 19th century, after discarding "false recognition," "paramnesia," and "promnesia," scholars had settled on a French candidate: "déjà vu," or "already seen."

The fleeting melancholy and euphoria associated with déjà vu have attracted the interest of poets, novelists, and occultists of many stripes. St. Augustine, Sir Walter Scott, Dickens, and Tolstoy all wrote detailed accounts of such experiences. (We will politely leave aside a certain woozy song by Crosby, Stills, Nash & Young.)

Most academic psychologists, however, have ignored the topic since around 1890, when there was a brief flurry of interest. The phenomenon seems at once too rare and too **ephemeral** to capture in a laboratory. And even if it were as common as sneezing, déjà vu would still be difficult to study because it produces no measurable external behaviors. Researchers must trust their subjects' personal descriptions of what is going on inside their minds, and few people are as eloquent as Hawthorne. Psychology has generally filed déjà vu away in a drawer marked "Interesting but Insoluble."

During the past two decades, however, a few hardy souls have reopened the scientific study of déjà vu. They hope to nail down a persuasive explanation of the phenomenon, as

well as shed light on some fundamental elements of memory and **cognition**. In the new book The Déjà Vu Experience: Essays in Cognitive Psychology (Psychology Press), Alan S. Brown, a professor of psychology at Southern Methodist University, surveys the fledgling subfield. "What we can try to do is zero in on it from a variety of different angles," he says. "It won't be something like, 'Boom! The explanation is there.' But we can get gradual clarity through some hard work."

89. The passage is primarily concerned with
(a) Examining a concept which is difficult to define
(b) Detailing the factors that have contributed to the use of a term among scientists and academicians
(c) Evaluating the pro and cons of a new concept
(d) Summarizing an old experience
(e) Detailing a scientific study

90. Which of the following best describes the organization of the passage?
(a) A concept is defined and is followed by details of the concept
(b) A generalization is stated and is then followed by instances that support the generalization
(c) An example of a concept is given and then followed by the explanation of the concept
(d) A theory is proposed and then followed by examples
(e) A paradox is stated, discussed and left unresolved

91. The author implies that which of the following accounts for the reasons why déjà vu was once difficult to capture in a laboratory.
(a) The social nature of the term made it uninteresting for academicians and laboratory workers
(b) The uninteresting nature of the term made it unattractive to academicians
(c) The term déjà vu is embedded in Psychology and therefore cannot be studied in the laboratory
(d) The phenomenon seems at once too rare and too ephemeral
(e) None of these

92. Which of the following would the author of the passage agree to most
(a) Déjà vu was invented and first used by academic psychologists
(b) The scientific study of déjà vu is now complete with many scientist studying
(c) Déjà vu was embraced by poets, novelists, and occultists of many stripes before academic psychologists
(d) Déjà vu is an exact science
(e) There is not a definite definition of Déjà vu

Directions (93-94): Choose the word/group of words which is **most similar** in meaning to the word/group of words printed in bold as used in the passage.

93. Perplexed
(a) Worried (b) Elucidate (c) Rattled
(d) Explicate (e) Confound

94. Ephemeral
(a) transient (b) elusive (c) unstable
(d) wanted (e) indiscernible

Directions (95): Choose the word/group of words which is **most opposite** in meaning to the word/group of words printed in bold as used in passage.

95. Cognition
(a) Ignorance (b) percipience (c) imagination
(d) speculation (e)perception

Directions (96-100): In each of the following questions a short passage is given with one of the lines in the passage missing and represented by a blank. Select the best out of the five answer choices given, to make the passage complete and coherent (coherent means logically complete and sound).

96. The divisions among her followers and detractors are as much ideological as they are intergenerational. A number of Ms. Park's party supporters continue to harbour sympathies for the daughter of South Korea's moderniser, the military dictator Park Chung-hee. But younger generations see the severing of all links with this authoritarian past as a necessary guarantee for the consolidation of democracy, three decades after return to civilian rule. The chaebols — South Korea's highly influential family-owned conglomerates — may have had economic motivations to lean heavily on political patronage during the country's industrial ascendency and integration into the global market. But such cosy arrangements are proving to be untenable when exceptions of the past are sought to be institutionalised. The task of public cleansing in South Korea is far from over, as is evident from the ongoing criminal proceedings involving tycoons from its best-known corporations. (……) . It would be no surprise, therefore, if South Korea's example becomes a model worthy of emulation elsewhere in the region.
(a) The removal of a sitting President in South Korea brings to a close one phase in the months-long popular mobilisation to enforce accountability among the high and mighty.
(b) The chief accusation is that they solicited contributions to promote dodgy non-profit organisations in return for clearing questionable corporate deals.

(c) They are seeking to strengthen the country's democratic institutions.
(d) The recent assertion of the independence of the judiciary from political interference and the capacity of legislators to uphold their authority are notable.
(e) It has escalated regional tensions and China has retaliated with calls for the boycott of South Korean imports.

97. Ruling on a petition filed by the Congress, the Supreme Court asked the BJP government in Goa to prove its majority within 48 hours, instead of the 15 days' leeway given by Governor Sinha. (……).The court's reluctance to uphold the principle of inviting the single largest party first and therefore, to stay Parrikar's swearing-in on Tuesday, is controversial.
(a) In Goa the Governor ignored the established principle of inviting the single largest party in the wake of a fractured mandate
(b) The Justice laid down some guidelines to be followed in the appointment of a chief minister by a governor
(c) The premise of the decision is questionable.
(d) The gubernatorial decision in Goa reek of partisanship.
(e) But it was a half-measure.

98. Certain issues that required the government's urgent attention continue to be neglected. (…… ……) . For instance, the strategic sale of public sector undertakings, which Modi reintroduced in the reform lexicon by getting the Union cabinet to approve its broad modalities in October last, is yet to move ahead substantively. The bad loan problem has its origins in the UPA's term when the private sector added huge capacities, built large infrastructure projects and borrowed a lot, hoping the economy would continue to grow rapidly.
(a) But this affirmation comes with enormous expectations, particularly of the youth
(b) The private sector continues to be saddled with excess capacity, and is unlikely to consider fresh investments.
(c) Much remains mired in bureaucracy even after the prime minister's promises.
(d) Huge debt on the large non-performing assets in the balance sheets of state-owned banks have jammed the wheels of the economy
(e) The government cannot over-spend, given its responsibility towards the fisc.

99. Pakistani atheists – a broad term encompassing agnostics, the irreligious, deists, and humanists alike – have been lazily painted by the Islamists as "liberals and seculars," despite the fact that many believing and practicing Muslims identify as such as well. Muslims openly identifying as atheist in Pakistan would be an open invitation to violence, (……..), coupled with the National Database and Registration Authority's (NADRA) refusal to let citizens officially change Islam as their religion. Hence, the aforementioned "secular liberal" label also provides refuge to the atheists.
(a) Considering the state's blasphemy laws are interpreted to outlaw apostasy
(b) as action against jihadist groups becoming inevitable.
(c) with the well-coordinated maneuver accused of being a state-backed operation by many quarters.
(d) Delineating the ideological divide
(e) The Islamists at the helm of state institutions have found the filter to sift atheists

100. India is not a signatory of the United Nations Refugee Convention; therefore it is not required to provide safe haven to people seeking asylum from persecution in other countries. No attempts have been made by the government to debate the issue of joining the United Nation Refugee Convention. That would have been the natural step to take if the government was indeed interested in formulating a humanitarian refugee policy. Further, the provisions of refugee protection cater to all minorities fleeing countries due to a humanitarian crisis but, in this bill, India is offering citizenship based on religious predilections. The bill, if passed in its current form, seeks to give preference to Hindu refugees over Muslim refugees migrating to India, which is unconstitutional as, the preamble of the Constitution confirms India as a secular state. The refugees who will actually benefit from this policy are living in abject poverty with no sanitation and infrastructure facilities. (……..)
(a) A closer look at the provisions indicates that the current government is attempting to increase its Hindu voter count.
(b) The government, instead of using a blanket policy, has made this a communal issue with a veiled political agenda, which would be counterproductive to the seemingly humanitarian goal of the bill.
(c) The bill at first glance seems like a humanitarian effort to help persecuted minorities but it only seeks to help Hindus, Sikhs, Buddhists, Jains, Parsis, and Christians from the neighboring Muslim countries.

(d) This policy in the Indian context would be contrary to the ideals of secularism and pluralism and thus unconstitutional.
(e) If the Citizenship (Amendment) Bill is passed, in its current form, then the border regions would face an influx of Hindu migrants, which would change the voter demographics in the region.

Directions (101-103): Five statements are given below, labelled a, b, c, d and e. Among these, four statements are in logical order and form a coherent paragraph/passage. From the given options, choose the option that does not fit into the theme of the passage/paragraph.

101. (a) It is a Chinese diplomatic tradition to celebrate the anniversaries of important events in its relations with foreign nations.
(b) Instead of high-level visits or grand ceremonies, however, the anniversary is marred by unprecedented confrontation between the two countries.
(c) The dramatic downturn in bilateral relations resulted from President Park Geun-hye's decision in July 2016 to deploy the THAAD (Terminal High Altitude Area Defense) system on South Korean soil.
(d) This year marks the 25th anniversary of the establishment of diplomatic ties between China and South Korea.
(e) Chinese sacrifices and friendliness apparently have been reciprocated by ingratitude and resentment.

102. (a) In the euphoria of the progress of the global economy or few national economies doing well, we conveniently forget the humongous failure rate of individual organizations.
(b) A look at the prevailing organization structures and processes does not give one the confidence that organizations are created with any deep understanding of human behaviour.
(c) Very few of them analyse why companies that were deemed icons of excellence are nowhere to be found just a few decades down the line.
(d) While a few unicorns are created every now and then, we forget that many more companies (some of them world leaders like Nokia) are biting the dust at an alarming rate.
(e) Management experts and analysts are more interested in talking about the few good organizations that have gone on to become great companies.

103. (a) The document opens with a broadside against the World Trade Organization (WTO), arguing that WTO decisions are not binding on American businesses unless Congress chooses to implement them.
(b) The Trade Policy Agenda lays out a general approach to trade that is, in its own words, aggressive and that in many cases appears to be strongly at odds with India's own position.
(c) The agenda and the accompanying annual report strongly suggest that India will be navigating an increasingly difficult trade terrain in the next few years.
(d) This threatens to relegate the WTO to the long list of international agreements that the US has refused to make part of domestic law, gutting the strength of the organization and possibly triggering a round of punitive tariffs by other nations.
(e) India, by contrast, has made the WTO the primary focus of its trade negotiation efforts and is poised to make a major play towards updating the Trade in Services Agreement.

Directions (104 – 105): Each question consists of a number of sentences which, when properly sequenced, form a coherent paragraph. Below each question are five options which gives the possible sequence of the coherent paragraph, choose the option which gives the correct sequence of the given coherent paragraph.

104. A. And everywhere—on the palace steps, and the great promenade, around the fountains, among the trees—hundreds and hundreds of people in gay costumes walked or ran or danced, and gave to the fairy picture the life and animation which was all of perfection it could have lacked. Concluding remark; the people complete the picture perfect settings
B. The scene thrills one like military music!
C. Versailles is wonderfully beautiful!
D. You gaze and stare and try to understand that it is real, that it is on the earth, that it is not the Garden of Eden—but your brain grows giddy, stupefied by the world of beauty around you, and you half believe you are the dupe of an exquisite dream.
E. A noble palace, stretching its ornamented front, block upon block away, till it seemed that it would never end; a grand promenade before it, where on the armies of an empire might parade; broad flights of stone steps leading down from the promenade to lower grounds of the park—stairways that whole regiments might stand to arms upon and have room to spar.

(a) EBCDA (b) CDEBA (c) CDBEA
(d) DCBEA (e) EBDAC

105. A. Her husband was employed outside Rajasthan and she had chosen Barmer to provide a good education to her children.
B. In a rare case of migration from a city to a village, Teeja Jakhar shifted to Chokhla from Barmer city along with her two daughters last year.

C. The British exploration company Cairn Energy PLC promised to pay her Rs 3 lakh per year for three years for rights to her land.
D. She earns Rs 6,000 per month by selling water drawn by her tubewell to Cairn.
E. She bought a diesel-run tubewell with the first installment and plans to grow at least one crop on her 40-acre plot.
F. But Mangla near Barmer, since January last year the site of India's biggest oil discovery in 22 years, changed all that.

(a) CAEBFD (b) BAFECD (c) CABFED
(d) BAFCED (e) BACFDE

Direction (106-107): Each statement has a part missing. Choose the best option from the four options given below the statement to make up the missing part:

106. Archaeologists believe that the pieces of red-ware pottery excavated recently near Bhavnagar _____ shed light on a hitherto dark 600-year period in the Harappan history of Gujarat.
(a) estimated with a reasonable certainty as being about 3400 years old.
(b) are estimated reasonably certain to be about 3400 years old
(c) estimated at about 3400 years old with reasonable certainty.
(d) estimated with a reasonable certainty to be about 3400 years old.
(e) None of these.

107. The ancient Egyptians believed _____ so that when these objects were magically reanimated through the correct rituals, they would be able to function effectively.
(a) that it was essential that things they portrayed must have every relevant feature shown as clearly as possible,
(b) it was essential for things they portray to have had every relevant feature shown as clearly as possible,
(c) it was essential that the things they portrayed had every relevant feature shown as clearly as possible,
(d) that when they portrayed things , it should have every relevant feature shown as clearly as possible.
(e) None of these

Direction (108-109): After reading the passage, choose the best answer to each question. Answer all questions following a passage on the basis of what is stated or implied in that passage.
A Marxist sociologist has argued that racism stems from the class struggle that is unique to the capitalist system – that racial prejudice is generated by capitalists as a means of controlling workers. His thesis works relatively well when applied to discrimination against Blacks in the United States, but his definition of racial prejudice as "radically-based negative prejudgments against a group generally accepted as a race in any given region of ethnic competition," can be interpreted as also including hostility toward such ethnic groups as the Chinese in California and the Jews in medieval Europe. However, since prejudice against these latter people was not inspired by capitalists, he has no reason that such antagonisms were not really based on race. He disposes thusly (albeit unconvincingly) of both the intolerance faced by Jews before the rise of capitalism and the early twentieth-century discrimination against Oriental people in California, which, inconveniently, was instigated by workers.

108. According to the passage, the Marxist sociologist's chain of reasoning him to assert that prejudice toward Oriental people in California was
(a) Non racial in character
(b) Similar in origin to prejudice against the Jews.
(c) Understood by oriental people as ethnic competition
(d) Provoked by workers.
(e) None of these.

109. The passage supplies information that would answer which of the following questions.
(a) What accounts for the prejudice against the Jews in Medieval Europe?
(b) What conditions caused the discrimination against the oriental people in California in the early twentieth century?
(c) Which groups are not in ethnic competition with each other in USA.
(d) What explanation did the Marxist sociologist give for the existence of the racial prejudice?
(e) None of these.

Directions (110–111) : Which of the words/phrases (a), (b), (c) and (d) given below should replace the words/phrases given in bold in the following sentences to make it meaningful and grammatically correct. If the sentence is correct as it is and 'No correction is required', mark (e) as the answer.

110. India has rarely witnessed a campaign **conformation** of the order witnessed in the last two phases of the poll. Mr.Modi spent three days in and around Varanasi alone, **endeavoring** to both retain the votes that **amassed** to him in his Lok Sabha constituency in 2014, and throw his voice longer in the election's home **empire**.
(a) Onslaught, opting, emanated, demesne
(b) Endeavour, eschewing, implored, territory
(c) exertion, aspiring, beseeched, domain
(d) blitz, seeking, accrued, stretch
(e) No improvement

111. A **reassuring** explanation could be that with rising incomes, women have the opportunity to escape harsh labour in farms and on construction sites, and focus on their families. But a more pessimistic and **comprehensible** realistic explanation might be that with declining farm sizes, rising mechanisation, and consequently **inflating** labour demands in agriculture, women are being forced out of the **venture**.

(a) invigorating, conceivable, aggravating, industries
(b) pragmatic, perhaps, diminishing, camaraderie
(c) heartening,possibly,dwindling,workforce
(d) rational, plausible, plummeting, profession
(e) No improvement

Direction (112): In the following questions, a related pair of words or phrases is followed by the five lettered pair of words or phrases. Select the lettered pair that best expresses a relationship similar to that expressed in the original pair.

112. PERTINENT: RELEVANCE

(a) OBSCURE: INGENIOUS
(b) INCOMPETENCE: CREDULITY
(c) PERSECUTION: IMBECILE
(d) INANE: LUDICROUS
(e) RENDEZVOUS : ASSIDUOUS

Directions (113-115): In each of the following questions, five options are given and you have to choose the one which has some or any grammatical error in it.

113. (a) A 25 basis points rate hike by the US Federal Reserve, which was already priced-in, plus a dovish stance augurs well for risk assets and for emerging markets.
(b) Since the beginning of this year, as the dollar has weakened against the rupee, the benchmark Sensex has soared.
(c) With Fed chair Janet Yellen being her usual dovish self, the market is now convinced it has the best of both worlds
(d) The key to risk appetite for emerging market assets such as Indian equities, therefore, lies in the strength of the dollar.
(e) Rameshwaram informed me that he had gone to one of the Minister's residences and stayed there all night.

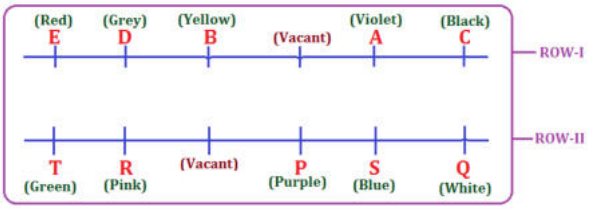
114. (a) The instances of theft and destruction of distributed renewable energy appliances has been very prevalent in programs especially run by aid agencies as part of corporate social responsibility or where the government provides a subsidy
(b) When the first solar units were installed in Bhamana in 2010, most houses got a small photovoltaic panel connected to a battery that could power a light for five to six hours.
(c) If any proof was needed to show that the United Nations have lately become a policy tool in the hands of the U.S.A. and that the world's sole might has a subservient international body, it was provided by President Bush's angry comment.
(d) Before the floor test began, Rane told reporters that the delay caused by the Congress leadership in staking claim to form the government had demoralized the people of Goa.
(e) Interestingly, while cricket still accounts for much of this, other sports are beginning to make their presence felt.

115. (a) The asset management firm was keen on investing in Sohan Lal and Co. because of its fully integrated and process-driven business model.
(b) If we had Mohan in our team, we would have won the match against your team.
(c) These products are expected to help cash-strapped developers get easier access to funds while also creating new investment avenues for institutional investors and high-net-worth individuals.
(d) A broken solar panel is all that the 35-year-old farmer has to remind him of the government's promise to bring electricity to all of India's villages.
(e) Many of the young people studying abroad agreed that returning home was always an attractive option.

Solutions

REASONING ABILITY

Direction (1-5):



1. **(d);** 2. **(b);** 3. **(a);**

4. **(d);** 5. **(e);**

6. **(d);** The issue discussed in the statement is nowhere related to increase in unemployment, as the number of vacancies filled in will remain the same. Also, in a working place, it is the performance of the individual that matters and that makes him more or less wanted, and not his educational qualifications. So, neither I nor II holds strong. Besides, the needs of a job are laid down in the desired qualifications for the job. So, recruitment of more qualified people cannot augment productivity. Thus, IV also does not hold strong. However, it is the right of an individual to get the post for which he fulfills the eligibility criteria, whatever be his extra merits. Hence, argument III holds strong.

7. (c) All the options may be the probable reasons except option IV because the reason in that option is contradictory to the statement. We Indians are matured enough to permit such exploratory things threatening national security. So, this must not be a probable reason.

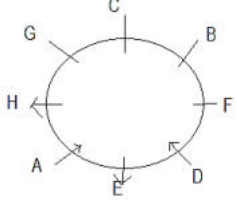
Direction (8-12)

8. **(c)** Both I and II is required to answer the question.

PERSON	SUBJECTS
A	English
E/C	Banking
B	Reasoning
D	Computer
C/E	Quant
F	General Awareness

9. **(a)** Neither I nor II is sufficient to answer the question.

10. **(c)** Both the statements are required to answer the question. Two persons are sitting between A and C.



11. **(d);** Only Statement I is sufficient to answer the question.

12. **(c);** From I: R, U>Q and S>P>T
From II: _>U and Q>_ and P>R
By combining both S>U>P>R>Q>T

13. **(d);** The time period of insurance scheme of Company X has not been mentioned in the statement. It may also be for 10 years and above 10 years. And we cannot compare the cost of Company X and Y because its mentioning is nowhere in the passage. So, (i) and (iii) are not the reasons behind the decision of the owner. But it is quite clear that Company Y has provided guarantee scheme for more period of time than that of Company X. So (ii) is the only reason behind the owner's decision.

14. **(e);** If repo rate goes down, loan rates will go down. In turn, the value of rupee will strengthen against other currencies. Consumer Price Index (CPI) measures changes in the price level of a market basket of consumer goods and services purchased by households; hence it should be jumped from its previous rates. Reduction in global crude prices also plays an important role for the rate cuts by RBI. So, none of the options negates the above steps taken by the RBI.

Direction (15-17):

15. **(c);** After analyzing DFD, we can determine that after taking permission from people of society Builder should have taken legal permission from concerned authority for renovation work.

16. **(c);** Data is insufficient to answer.

17. **(b);** For renovation, Builders should take legal permission from concerned authority for renovation.

18. **(c);** In option (C), it is mention that X is female without which the given information may be completed because relaxation of age doesn't required here (the condition of age is already satisfied in option (A)). So, option (C) will be placed at last position.

Direction (19-21): Visual – T86
For – L23
Effects – K93

19. **(c);** the code of 'eye' can be M18 or N27. So option (iii) and (iv) can be the correct answer.

20. **(b);** the code for 'development' can be A10, H32 or Y16 so the (b) can be the correct answer.

21. **(d);** the code for 'detachment' can be G14 or S21 so (d) option is the correct answer as both code are present in all other options.

Direction (22-26):

Person	Post	City
P	CEO	Patna
Q	ED	Bhopal
R	CGM	Mumbai
T	GM	Jaipur
V	DGM	Ranchi
S	MG	Chandigarh
U	AM	Agra

22. (b); 23. (d); 24. (a);

25. (d); 26. (d);

Direction (27-31):

27. (b); Even number is followed by an odd prime number so =4+5= 9
Then 1 row - 9 2
Odd number is followed by an even number so = 9*2=18 (sum of first row)
In row 2 Odd number is followed by a perfect square so =13-9 =4
Then 2 row- 4 3
Even number is followed by an odd prime number so = 4 +3 = 7(sum of second row)
So the resultant of both row = 18 + 7 = 25

28. (a); Odd number is followed by a perfect square so =11-9 = 2, the row is 2 7
Even number is followed by an odd prime number so =2 + 7 = 9(sum of first row)=X
The second row is 17 9 3
Odd number is followed by a perfect square so =17 – 9 = 8
Even number is followed by an odd prime number so = 8 +3 = 11

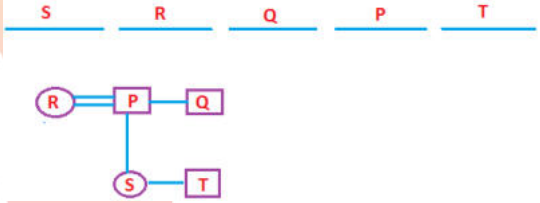
29. (b); Even number is followed by an nonprime odd number so =18- 15 = 3
The row is 3 6
Odd number is followed by an even number so =3 *6 = 18(sum of 1 row)
Even number is followed by an odd number (prime) so =8 +3= 11
The sum of the rows is 20 so the sum of second row= 20- 18 = 2
When X = 9, then the second row is 11 9
Odd number is followed by a perfect square so 11-9=2.so this condition can satisfy only when X=9.

30. (d); Odd number is followed by a perfect square so =5-4= 1
Odd number is followed by an odd number so = 1 + 15 = 16(sum of row)
Odd number is followed by a perfect square so =21-16 = 5
Odd number is followed by a perfect square so = 5 -4 =1(sum of row 2)
So the difference is = 16 – 1 = 15

31. (b); In second row, Odd number is followed by a perfect square so =43-36=7
Odd number is followed by an even number so =7 *2 = 14(sum of second row)= X
First row is 14 5 16
Even number is followed by a prime odd number so = 14 + 5 = 19
Odd number is followed by a perfect square so = 19-16 = 3(sum of first row)
So the resultant is 14 + 3 = 17

32. (c); In option (A) Mohit got only 82% in written test but criteria is 85% in written test and in Option (D) also he got only mean percentage of 28% in Group discussion and Physiological test rounds and criteria is 30% in both rounds. So Only (A) and (D) option are follow.

Direction (33-35):



33. (b); 34. (a); 35. (c);

Direction (36-37):

36. (c); Only in this case P < R ≥ Q = M ≤ N ≤ L , P ≥ Q and M < l are definitely false. In the other options they are definitely true.

37. (b); F = G ≤ E < J > I = H
Conclusion H < J > G and E ≥ F definitely true only when the symbol © is placed in the blank.

38. (e); Clearly, illiterate people lack will power and maturity in thoughts. They may easily be misled into false convictions or lured into temptations to vote for a particular group. So, argument II holds. However, a person is literate does not mean that he is conscious of all political movements, which requires practical awareness of everyday events. Thus, I also holds strong. Besides, Constitution has extended the right to vote equally to all its citizens. Hence, III also holds.

39. (d); All the points in the options promote green initiatives except auditing of water consumption as it is an examination of system records and equipment that may be used to identify, quantify and verify how much water passes through the system and where it goes.

Direction (40-42): The machine rearranges one number and one word in each step. Words are arranged in an alphabetical order whereas numbers are arranged in an order of decreasing order and there is an addition of two in every even numbers and subtraction of two in every odd numbers. In first step, firstly there is an arrangement of number and then alphabet. In second step, firstly there is an arrangement of alphabet and then number and so on. And there is replacement of last digit of alphabets with 'ish' after rearrangement.

Input: 22 39 since 12 growth sector 76 future demand 25
Step I: 78 demanish 22 39 since 12 growth sector future 25
Step II: futurish 37 78 demanish 22 since 12 growth sector 25
Step III: 23 growtish futurish 37 78 demanish 22 since 12 sector
Step IV: sectoish 24 23 growtish futurish 37 78 demanish since 12
Step V: 14 sincish sectoish 24 23 growtish futurish 37 78 demanish

40. (e); 41. (e); 42. (d);

43. (b); 'Short-term loans' refer to the loans scheduled to be repaid in less than a year. When your business does not qualify for a line of credit from a bank, you might still have success in obtaining money from then in the form of a one-time, short-term loan (less than a year) to finance your temporary working capital needs.

44. (c); it is clearly mention that Google has agreed that Nest's privacy policies are going to be well- respected instead of any terms and conditions.

45. (c); The statement talks about cleaning the Indian politics from criminalization be considered. choice (b) can not be considered as nothing related to selection of best people from constituency is mentioned in the statement.

QUANTITATIVE APTITUDE

Solutions (46-47): Let no. of red balls=R
No. of blue balls=B
Probability of selecting red ball=$\frac{R}{R+B+6}=\frac{1}{2}$
R=B+6..... (I)
Probability of selecting blue ball= $\frac{B}{R+B+6}=\frac{2}{7}$
5B= 2R+12..... (II)
Solving (I) & (II) ,B= 8, R=14 , Total number of balls $= 6 + 14 + 8 = 28$ balls

46. (a); Favourable numbered balls
$= 3,6,7,9,12,14,15,18,21,24,27,28$
Required probability $= \frac{12}{28} = \frac{3}{7}$

47. (d); Total number of balls $= 6 + 14 + 8 = 28$ balls

Solutions (48-50):

48. (a); Radius of circle $= \frac{44}{2\pi} = 7$ cm
Quantity I – Area of shaded region $= \frac{1}{2}\pi(7)^2 - \frac{1}{2}\times\frac{1}{2}\times 14\times 14 = 28\ cm^2$
Quantity II $= 22\ cm^2$
Quantity I > quantity II

49. (b); as Y < 0, so quantity I will always be less than zero.

50. (c); Let Speed of boat in still water and speed of current =6x and x
$2(6x + x) - 2(6x - x) = 8\ , x = 2$
quantity I, speed of boat in still water = 12 km/h
Quantity II, speed of cyclist = 14 km/h
Quantity I < quantity II

Solutions (51-55):

51. (e); Let cost price of P $= x$
And cost price of R $= x$
SP of P $= 2x \times \frac{6}{10} = 1.2x$
SP of R $= 1.6 \times \frac{3}{10} = 0.48x$
Required percent $\frac{(1.2x-0.48x)}{0.48x} = 150\%$

52. (a); Let CP of R = 100
M.P. = 160
S.P. $= \frac{3}{10}\times 160 = 48$
Loss $= \frac{52}{100}\times 100 = 52\%$
If C.P. $= 100 \times \frac{110}{100} = 110$
Then loss $= \frac{62}{110}\times 100 = 56.36\%$
Increase in loss = 4.36%

53. (a); Let SP of Q = x =SP of T
And CP of Q = a
CP of T = b
$1.4\ Q \times \frac{70}{100} = 2.2T \times \frac{40}{100}$
T : Q = 49 : 44

54. (c); SP of P $= \frac{200}{100}\times P \times \frac{60}{100} = 1.2\ P$(P=cost price)
Profit percentage of P = 20%
Profit percentage of Q = – 2% (loss)
Of R = – 52% (loss)
Of S = – 40% (loss)
Of T = – 12% (loss)
So R has the highest loss percentage.

55. (e); If MP is some, then the item whose marked up % with respect to CP is lowest, will have highest CP,
So the item with 2nd highest CP is the item with second lowest marked up % with respect to CP i.e. Q.

Solutions (56-60):

56. (d); Let no. of tourist in 4th quarter $= x$
No. of tourist in 3rd quarter
$= \frac{30}{100} \times 3000 = 900$
$\frac{900}{3000+x} \times 100 = 25, x = 600$

57. (a); International tourist in IInd quarter
$= \frac{25}{100} \times 1800 = 450$
International tourist in 4th quarter = 600
Required percent $= \frac{600}{2400} \times 100 = 25\%$

58. (c); required percent
$= \frac{58\% \ of \ 3000}{65\% \ of \ 1800} \times 100 = 148.7 \approx 149\%$

59. (d); Required percent $= \frac{(1050-630)}{630} \times 100 = 66.67\%$

60. (c): total no. of international tourist
$= \frac{125}{100} \times 1800 = 2250$
No. of international tourist of Ist quarter
$= \frac{9}{7} \times 630 = 810$
Required percentage $= \frac{810}{2250} \times 100 = 36\%$

Solutions (61-62):

61. (e); Let the expenses are 500, 400 and 300 respectively
Money saved $= \frac{15}{100} \times 500 + \frac{25}{900} \times 300 = \frac{250}{3}$
Actual amount saved = Rs. 17500
So total amount $= 17500 \times \frac{3}{250} \times 1200$ = Rs. 252000
Accommodation expense $= \frac{400}{1200} \times 252000 =$ Rs. 84000

62. (b); 252000

Solutions (63-67):

63. (a); No. of students from college R who attended at most 3 seminars $= 11400 \times \frac{74}{100} = 8436$
$\therefore$ Required students $= \frac{8436}{57} \times 25 = 3700$

64. (d); Let total no. of students from college T = 100
Total no. of students from college P $= \frac{20}{35} \times 100 = 57\frac{1}{7}$
$\therefore$ Required % $= \frac{57\frac{1}{7}}{100} \times 100 = 57\frac{1}{7}\%$

65. (e); Total no. of students from college P
$= \frac{48}{15} \times 100 = 320$
Total no. of students from college S
$= \frac{(64+14)}{12} \times 100 = 650$
Required % $= \frac{481-208}{481} \times 100 = 56.75 \approx 57\%$

66. (c); Total no. of students from college T $= \frac{22}{8} \times 100 = 275$
Total no. of students from college R
$= \frac{60}{100} \times 275 = 165$
Required No. of students $= = 16.5 \times 2 = 33$

67. (c); 1 seminar 2 seminar
9x 4x
5x
5x = 35, x = 7
So no. of persons attending 1 seminar = 63
So no. of persons attending 2 seminar = 28
Required no. of students $= (63 + 28) \times \frac{66}{26} = 231$

Solutions (68-72):

68. (e); Let total salary in 2002 $= x$
Total salary in 2005 $= y$
$\frac{42\% \ of \ x}{30\% \ of \ y} = \frac{7}{5}$
$\frac{x}{y} = \frac{7}{5} \times \frac{30}{42}$
Ratio of EMI expenses $= \frac{0.40x}{0.35y} = \frac{7}{5} \times \frac{30}{42} \times \frac{8}{7} = 8 : 7$

69. (b); Saving in 2004 $= \frac{58}{100} \times 175000$ = Rs. 101500
Saving in 2002 $= \frac{3}{5} \times 101500$ = Rs. 60900
Transport expenditure in 2002
$= \frac{18}{42} \times 60900$ = Rs. 26100

70. (a); Let salary in 2003 = 100
Salary in 2005 $= \frac{200}{100} \times \frac{200}{100} \times 100 = 400$
Expenses on transport in 2003 = 50
Required ratio $= \frac{400}{50} = 8 : 1$

71. (d); EMI expanses : saving in 2002
$= \frac{40}{42}$, and it is the 3rd highest.

72. (a); Required average $= \frac{40+18+50+17+35}{5} = 32\%$

Solutions (73-75):

73. (e); $\frac{M}{W} = \frac{3}{1} \times \frac{12}{15} = \frac{12}{5}$
$\therefore 24 \times x \times 12 = 32 \times 5(x + 8)$
$288x = 160x + 160 \times 8$
$128x = 160 \times 8 \Rightarrow x = 10$

74. (c); M $\rightarrow$ 240 days
W $\rightarrow 32 \times 18 = 576$ days
Remaining work after 6 days $= 1 - 6\left(\frac{10}{240} + \frac{24}{576}\right)$
$= 1 - 6\left(\frac{1}{24} + \frac{1}{24}\right)$
$= 1 - \frac{6}{12}$
$= 1 - \frac{1}{2} = \frac{1}{2}$
$\therefore$ Boy $\rightarrow 2 \times 18 \times 18 \rightarrow 648$ days
$\therefore$ Required No. of days $= \frac{648}{12} = 54$ days

75. (e); Required difference
= 576 – 240 = 336 days

Solutions (76-80):

76. (a); From A, M : W = 3 : 1
From C, W → $14 \times \frac{3}{2} = 21$ days, M=7days, so question can be answered from A and C

77. (b); From I, Total profit = 54000
Time = 1 year
From II, we will get the ratio of their investment = 3 : 4 : 2
From III, profit of V = profit of A + 4000
$4x = 2x + 4000$
$2x = 4000$
$x = 2000$
From II and either I or III, we can get the share of R.

78. (b); Let distance = d
Speed in still water = x
Speed of current = y
$\therefore \frac{d}{x} = 2$
From A, d given
B, $\frac{d}{x+y}$ = given
C, y = given, so upstream speed can be calculated by using any 2 of the 3 statements

79. (d); From I, $\ell : b = 3 : 2$
From II, length = 48 m
Cost of flooring = 850 per sq m
$\therefore \ \ell = 48$ m
$b = 32$ m
Area $= 48 \times 32$
Required price = $48 \times 32 \times 850$ Rs.
From III, perimeter = 160
Length = $3 \times 16 = 48$ m
Breadth = $16 \times 2 = 32$ m
∴ Required cost = $48 \times 32 \times 850$ Rs.
∴ we can get the cost of flooring a rectangular hall any of the two statements.

80. (d); Let the required number = $10x + y$
From I = $x^2 + y^2 = 26$
From II, $(10x + y) : (x + y) = 5 : 2$
From III, $x = y - 4$
$y - x = 4$
We can get the value of x and y with the help of any of the two statements.

ENGLISH LANGUAGE

81. (c); The entire passage simply elaborates the thoughts introduced in the first two sentences of the passage. Hence statement (c) is the main idea of the passage.
Option (b) is incorrect which can be inferred from the first few lines of the 3rd paragraph of the passage, "Eusocial insect societies exhibit social organization based on rigid caste system. On the other hand, In naked mole rat societies differences in behavior are related to reproductive status, body size and age."
Option (d): The mating habits of naked mole rats are similar to wild dog, Lycaonpictus.
Option (e): In naked mole rat colonies subordinate females are not sexually active and many never breed, unlike eusocial insects.

82. (b); The rate of growth depends not on age but length of time spent in work. Refer to the last few lines of the 3rd paragraph of the passage "Jarvis' work has suggested……its age". Hence statement (b) is true in context of the passage.

83. (b); It is not actually shape but size that creates the difference in performance of tasks in naked mole rat colonies and in eusocial insect societies.
Option (a): In naked mole rat colonies, all tasks are not performed cooperatively as these vertebrates are dominated by a single breeding female.
Option (c): In naked mole rat colonies, breeding is limited to its queen (single female).
Option (d): In eusocial insect societies, reproduction is limited to the largest animals.
Option (e): In eusocial insect societies, the distribution of tasks is based on body shape not body size.

84. (d); The second last sentence suggests a similarity between naked mole rats and Lycaon pictus in view of their breeding pattern in which breeding is limited to a single female and not cooperative. Hence option (d) is true in context of the passage.

85. (a); Option (a) is correct as naked mole rat are very altruistic in their nature which can be inferred from the 1st paragraph of the passage, "Until recently, scientists did not know of a close vertebrate ……survive and reproduce, for the good of others".

86. (c); Suppress means inhibit or forcibly put an end to. Hence it is most similar in meaning to Subdue. Ostracize means exclude from society. Proscribe means forbid. Reticent means reserved.

87. (d); Subordinate means junior or lower in position and is most similar in meaning to adjutant which means a military officer who acts as an administrative assistant to a senior officer. Indigent means poor, needy. Appendage, Adjunct means addition or attachment. Patron means contributor or sponsor.

88. (c); Pronounce means declare or announce in a formal or solemn way which is opposite to enshroud. Enunciate and Adjudicate are synonyms of it. Opine means hold and state as one's opinion. Interpose means place or insert one thing and another.

89. (a); The passage is concerned with the topic 'deju vu' that is difficult to study as it produces no measurable external behaviors. Hence statement (a) is true. The passage is not concerned with the strengths and weaknesses of any concept as mentioned in option (c).

90. (c); Option (a), (b), (d) and (e) are not true as the definition of the concept, theory or paradox is not mentioned, instead an example of the concept (Hawthorne) is given. Here from the passage, it can be stated that Hawthorne's example has been set in the discussion of déjà vu. Hence statement (c) is relevant.

91. (d); Option (a) is not true as social nature of the term attracted the interests.
Statement (d) is the correct choice.
Refer to the lines "The phenomenon seems…….external behaviors". Hence option (d) is true in context of the passage.

92. (c); Refer to the lines "the fleeting melancholy…….. occultists of many strips". Other options are irrelevant to the passage.
Option (a) is not true as academic psychologists have ignored the topic rather than using it.
Option (b) is not true as according to the passage, the scientific study of déjà vu is difficult to study.
Déjà vu have attracted the interest of poets, novelists, hence it is not an exact science as mentioned in option (d).
option (e) is not true as definite definition is not mentioned in the passage.

93. (e); Perplexed means puzzled or completely baffled. Hence it is similar in meaning to confound which means to cause surprise or confusion in (someone), especially by not according with their expectations. Rattled means making worried, nervous.

94. (a); Ephemeral means lasting for a very short time. Hence it has same meaning as transient. Elusive means difficult to find, remember. Indiscernible means unnoticeable.

95. (a); Cognition means perception. Hence it is most opposite in meaning to incomprehension. Percipience means perception, hence similar to cognition.

96. (d); Option (d) is correct as it is making the argument in the previous sentence even more stronger by giving an evidence of how public cleansing is far from over and the action against the prominent figures is just one of the phase as the sentence talks about the capacity of the judicial authority.

97. (e); Option (e) is correct and is in harmony with the theme of the passage as in the passage/ paragraph we are talking about the court's decision and why it is controversial. Option (e) points out how the decision is only a half- measure and the incompetence of the court in taking a full measure is what that makes it controversial.

98. (c); Option (c) is giving emphasis upon the stagnancy of many issues even after Modi's promises and the sentence after the blank completely justifies it by giving one more examples of one such issue.

99. (a); Option (a) fits the paragraph/passage most appropriately and is in complete harmony with the theme of the passage. Other options are out of context and are irrelevant.

100. (b); The passage/ paragraph is talking about how ignorant our government has been in catering to the needs of the refugees and how the proposed bill is not secular as it is giving preference to the hindu refugees. The last line of the question which is not the concluding line is talking about the pathetic condition of the poor and option (b) is continuing with the theme of the passage as it is criticizing the government's effort in making this issue a communal one.

101. (e); The options other than (e) are forming a coherent paragraph with their sequence being adbc. Option (e) is out of context as the theme of the passage is how there has been a sourness in the relationship between China and South Korea lately and what caused it. While other options are in perfect sequence, the idea in option (e) is not resonating with the central theme of the paragraph/ passage.

102. (b); Option (b) is not a part of the coherent paragraph as it explains the unexpectedly high failure rates of organizations while other options with their sequence being adec are part of one coherent paragraph as they are talking about the issue.

103. (c); Option (c) is correct and is not a part of the coherent paragraph as it puts more emphasis on the suggestions made by report. Other option talks about the comparison of the stances of India and USA toward WTO.

104. (c); As the paragraph describes an incredibly beautiful place, the 3rd sentence is the opener. The 4th sentence compares it with the Garden of Eden. The second sentence describes the 'thrill' and compares it with a military band. The 5th sentence takes the metaphor further to compare the promenade and stone steps with the armies parading. The 1st sentence concludes that people in the area complete the 'perfection it could have lacked.' Therefore, CDBEA is the answer.

105. (d); BAFCED is the correct sequence.

106. (d); Option (d) fits into the blank. In option (a) the usage of the indefinite article is erroneous. Options (b) and (c) are erroneous due to the incorrect ordering of words.

107. (d); The tense in options (a) and (b) is not consistent. Moreover, option (a) uses both 'essential' and 'must', thus rendering either one of these words redundant. In option (d) 'things' the plural form cannot take 'it'. Hence option (d) is the answer.

108. (a); In last line of the passage, the tone of author is such that this theory is not able to explain the occurrence of racial discrimination in other communities such as Jews and Chinese, therefore options (b), (c) and (d) are out of the question. Hence the answer is option (a).

109. (d); The answer is option (d), which would answer the information in the passage as the explanation of racism is given in the 1st line of the passage. All other options are sub-parts of the passage which the author has talked about. Hence the answer is option (d).

110. (d); **Blitz** means a sudden concerted effort to deal with something.
Seeking means attempt or desire to obtain or achieve (something).
Accrued means (of a benefit or sum of money) be received by someone in regular or increasing amounts over time.
Stretch means to extend or spread over an area or period of time.

111. (c); **Workforce** means the people engaged in or available for work, either in a country or area or in a particular firm or industry.
Dwindling means to diminish gradually in size, amount, or strength.
heartening means to make more cheerful or confident.
venture means to undertake a risky or daring journey or course of action.

112. (d); Pertinent means relevant or applicable to a particular matter; apposite hence is the synonym of relevance. Only Inane and ludicrous are the synonyms and have the same relationship hence option (d) is the correct choice for the given question.

113. (e); Use "the residence of one of the ministers" in place of "one of the Minister's residences".

114. (c); Use 'has' in place of 'have'.

115. (b); Use 'we had had mohan'

REASONING ABILITY

Direction (1-5): Study the following information carefully and answer the questions given below:

Eight persons are sitting around a circular table facing to the center but not necessarily in the same order.

Two persons sit between Q and P (either from left or right). R sits immediate to the right of Q. One person sits between R and S, who faces to T. Q and T are not immediate neighbors of each other. W sits 2nd to the left of V. Three persons sit between U and V.

1. Four of the following five are alike in a certain way and hence they form a group. Which one of the following does not belong to that group?
(a) Q-W (b) P-U (c) S-W
(d) V-T (e) Q-P

2. Who among the following sits immediate right of U?
(a) W (b) R (c) T
(d) S (e) V

3. The number of persons sit between Q and T , when counted to right of Q is same as the number of persons sit between W and ___, when counted to the left of ___?
(a) P (b) S (c) T
(d) U (e) None of these

4. Who among the following faces R?
(a) U (b) V (c) P
(d) W (e) Q

5. Who among the following sits 3rd to the right of S?
(a) P (b) U (c) Q
(d) T (e) None of these

Direction (6-10): Study the following information carefully and answer the questions given below:

Ten persons are sitting in two parallel rows containing five persons in each row such a way that there is an equal distance between adjacent persons. In the first row, A, B, C, D and E are seated and all of them are facing north. In the second row, P, Q, R, S and T are seated and all of them are facing south. Therefore, in the given seating arrangement, each member seated in a row faces another member of the other row.

E sits 2nd from one of the extreme end of the row. P faces the one who sits 2nd to the right of E. D sits 2nd to the left of B, who does not sit at the extreme end. Two persons sit between S and Q. R sits immediate left of S. C sits next to B.

6. Who among the following faces Q?
(a) B (b) D (c) A
(d) C (e) None of these

7. Who among the following sits at the extreme end of the row?
(a) E (b) T (c) C
(d) R (e) P

8. Four of the following five are alike in a certain way and hence they form a group. Which one of the following does not belong to that group?
(a) Q (b) A (c) T
(d) D (e) P

9. Who among the following sits 2nd to the right of P?
(a) S (b) R (c) Q
(d) T (e) None of these

10. What is the position of A with respect to E?
(a) 3rd to the left
(b) Immediate to the left
(c) 2nd to the left
(d) 3rd to the right
(e) 2nd to the right

11. In the word 'PRODUCE', how many pairs of the letters have the same number of letters between them in the given word as they have in the English alphabet series?
(a) Four (b) Two (c) One
(d) Three (e) More than four

Direction (12-15): In each of the questions below are given some statements followed by some conclusions. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

12. Statements: All Chocolate are Toffee. No Toffee is Muffin. Only a few Muffin are Dark.
Conclusions: I. No Chocolate is Muffin.
II. Some Toffee can never be Dark.
(a) If only conclusion II follows.
(b) If only conclusion I follows.
(c) If neither conclusion I nor II follows.
(d) If either conclusion I or II follows.
(e) If both conclusions I and II follow.

13. Statements: No Party is Gathering. All Summary are Gathering. Only a few Gathering are Committee.
Conclusions: I. Some Committee can be Summary.
II. Some Party can be Committee.
(a) If either conclusion I or II follows.
(b) If only conclusion I follows.
(c) If neither conclusion I nor II follows.
(d) If only conclusion II follows.
(e) If both conclusions I and II follow.

14. Statements: No Market is Home. Only a few Home are Room. Only a few Room is Vance.
Conclusions: I. Some Home are Vance.
II. Some Market can never be Room.
(a) If only conclusion I follows.
(b) If neither conclusion I nor II follows.
(c) If either conclusion I or II follows.
(d) If only conclusion II follows.
(e) If both conclusions I and II follow.

15. Statements: Some Ball are Garden. All Garden are Trade. Only a few Trade are Pump.
Conclusions: I. Some Ball are Pump.
II. Some Garden can be Pump.
(a) If only conclusion II follows.
(b) If neither conclusion I nor II follows.
(c) If either conclusion I or II follows.
(d) If only conclusion I follows.
(e) If both conclusions I and II follow.

Direction (16-20): Study the following information carefully and answer the questions given below:
Seven persons are buying different things. Only one person buy thing between C and A. B is buying thing immediately before C. Two persons buy things between C and D. C buy things after D. E buys thing immediately before D. More than three persons buy things between E and F. Only three persons buy things between D and G.

16. How many persons buy things between A and F?
(a) One (b) Two (c) Three
(d) Four (e) More than four

17. Who among the following buy thing immediately after F?
(a) D (b) B (c) G
(d) A (e) No one

18. Who among the following buy thing immediately before G?
(a) D (b) B (c) C
(d) A (e) No one

19. How many person buy things before A?
(a) One (b) Two (c) Three
(d) Four (e)More than four

20. As many as persons are buying things before D as after___?
(a) E (b) B (c) F
(d) A (e) G

Direction (21-23): Study the following information carefully and answer the questions given below**:**

Point S is 15m west of point R. Point R is 30m south of point Q. Point P is 20m west of point Q. Point U is 15m south of point P. Point T is 35 north of point S.

21. If point V is exactly between point Q and R, then how far and in which direction is point U with respect to V?
(a)15m, North-East
(b) 15m, East
(c) 10m, North-west
(d) 20m, West
(e) 20m, North-East

22. Four of the following are alike in a certain way, so form a group. Which of the following does not belong to that group?
(a) P, T (b) U, Q (c)R, P
(d) S, Q (e) U, T

23. If point W is in 5m east of point U, then what is the distance between point W and Point S?
(a) 5m (b) 15m (c) 25m
(d) 10m (e) 20m

Direction (24-26): Study the following information carefully and answer the questions given below:

A certain number of persons are sitting in the row. All of them are facing towards north. Q sits sixth from the right of S. T sits forth to left of Q. Only two persons sit between Q and P. R sits forth to the left of S. U sits between S and T. V sits second to the right of U. W is third from any of the end. S is eight from the left end of the row. Six persons sit between W and V.

24. How many numbers of persons could sit in the row?
(a) 14 (b) 18 (c) 23
(d) 15 (e) 20

25. What is the position of 'W' with respect to Q?
(a) Fourth to the right
(b) Fifth to the right
(c) Fourth to the left
(d) Eighth to the right
(e) Sixth to the left

26. If X sits immediate right of V then how many persons sit between X and P?
(a) Five (b) Six (c) Four
(d) Three (e) None of these

27. If it is possible to make only one meaningful word with the 2nd, 4th, 6th and 7th letters of the word 'UNILATERAL' which would be the second letter of the word from the right end? If more than one such word can be formed give 'Y' as the answer. If no such word can be formed, give 'Z' as your answer.
(a) Y (b) N (c) L
(d) T (e) Z

Directions (28-30): In each of the question, relationships between some elements are shown in the statements. These statements are followed by conclusions numbered I and II. Read the statements and give the answer.
(a) If only conclusion I follows.
(b) If only conclusion II follows.
(c) If either conclusion I or II follows.
(d) If neither conclusion I nor II follows.
(e) If both conclusions I and II follow.

28. Statements: $A \geq B \geq C = D > E \leq F < G$
Conclusions: I. $E < B$ **II.** $G > E$

29. Statements: $P \leq R < T = U$; $Q \geq T \leq S \geq V$
Conclusions: I. $Q > P$ **II.** $V < R$

30. Statements: $L > M = O \geq P$; $N \leq M \geq S \geq T$
Conclusions: I. $T \leq P$ **II.** $N < L$

Directions (31-35): Study the following sequence and answer the given questions.

A @ 3 4 % E N M $ 8 6 & L D S # 9 8 6 Q Y Z 1 7 % R O G @ 2 I B 2 U &

31. Which of the following element is sixth to the left of the fourteenth from the left end of the given arrangement?
(a) 6 (b) % (c) $
(d) M (e) None of these

32. If all the symbols are dropped from the series, which element will be twelfth from the right end?
(a) 9 (b) Q (c) R
(d) Y (e) None of these

33. How many such numbers are there in the given series which are immediately preceded by a symbol and followed by a letter?
(a) None (b) One (c) Two
(d) Three (e) Four

34. How many such letters are there in the given series which are immediately preceded by number and immediately followed by a symbol?
(a) One (b) Two (c) Three
(d) More than three (e) None of these

35. Find the odd one out?
(a) N64 (b) D86 (c) Y%8
(d) R27 (e) 8EL

Quantitative Aptitude

Directions (36-40): What will come in the place of question mark (?) in the following number series:

36. 11, ?, 16, 21, 29, 41
(a) 12 (b) 14 (c) 15
(d) 13 (e) 11

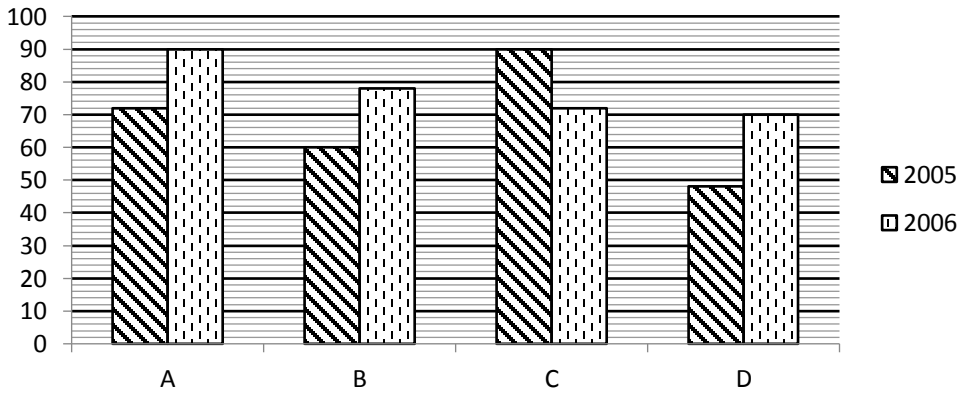
37. 1800, ?, 60, 15, 5, 2.5
(a) 300 (b) 600 (c) 120
(d) 240 (e) 360

38. 4, 3, 4, 9, 32, ?
(a) 75 (b) 155 (c) 125
(d) 175 (e) 165

39. ?, 100, 150, 375, 1312.5
(a) 50 (b) 100 (c) 75
(d) 25 (e) 200

40. 0, 6, 24, 60, ?, 210
(a) 130 (b) 170 (c) 90
(d) 120 (e) 150

Directions (41-45): Study the bar chart given below and answer the following questions.
Bar chart shows the number of books read by 4 different persons (A, B, C & D) in 2005 and 2006.



41. Find average number of books read by A, C & D in 2005.
(a) 64 (b) 70 (c) 75
(d) 60 (e) 56

42. Find ratio of books read by B & C together in 2005 to books read by A & D together in 2006.
(a) 15 : 16 (b) 5 : 6 (c) 1 : 5
(d) 4 : 7 (e) 2 : 3

43. Books read by A & D together in 2005 are what percent more than books read by C in 2006?
(a) $46\frac{2}{3}\%$ (b) $54\frac{1}{3}\%$ (c) $25\frac{2}{3}\%$
(d) $33\frac{1}{3}\%$ (e) $66\frac{2}{3}\%$

44. Books read by A & C together in 2005 are how much more or less than books read by B & D together in 2006?
(a) 24 (b) 14 (c) 18
(d) 22 (e) 28

45. Books read by B & C together in 2006 are what percent of books read by B in 2005?
(a) 100% (b) 120% (c) 250%
(d) 200% (e) 160%

Directions (46-55): What will come in place of (?) question mark in the following questions?

46. $\frac{17.28 \div ?}{3.6 \times 0.2} = 200$
(a) 120 (b) 1.20 (c) 12
(d) 0.12 (e) None of these

47. $486 \div ? \times 7392 \div 66 = 1008$
(a) 54 (b) 55 (c) 52
(d) 53 (e) 51

48. $14\frac{2}{7}\%$ of $4200 \div \sqrt{576} = (?)^{\frac{1}{2}}$
(a) 125 (b) 225 (c) 25
(d) 5 (e) 625

49. $\frac{2}{7} \times \frac{5}{6} \times \frac{3}{8} \times ? = 90$
(a) 1208 (b) 1108 (c) 1008
(d) 1128 (e) 1348

50. $(0.05 \times 6.25) \div 2.5 = ?$
(a) 12.55 (b) 0.125 (c) 0.115
(d) 1.25 (e) None of these

51. $1496 \div 17 = ?\%$ of 220
(a) 25 (b) 40 (c) 50
(d) 75 (e) None of these

52. (36% of 180) ÷ 0.4 = ?
(a) 160 (b) 164 (c) 166
(d) 162 (e) 180

53. 0.08% of 55500 – 16.4 = ?
(a) 26.6 (b) 28 (c) 29.2
(d) 30.4 (e) 32

54. 35% of 150 × 16 = ? – 22
(a) 865 (b) 932 (c) 864
(d) 862 (e) None of these

55. (3080 + 6160) ÷ ? = 330
(a) 26 (b) 22 (c) 28
(d) 29 (e) 18

56. Difference of the compound interest received in first year and second year at 20% per annum at CI is Rs 1200 then find the sum?
(a) Rs 25,000 (b) Rs 36,000 (c) Rs 35,000
(d) Rs 24,000 (e) Rs 30,000

57. Find the total distance covered by boat in each upstream and downstream in 7 hours if the speed of boat in still water and speed of current is 21 km/h and 3 km/h respectively?
(a) 280 km (b) 294 km (c) 315 km
(d) 301 km (e) 322 km

58. Ratio of income of A to that of B is 5:9. If expenditure of A is $\frac{3}{8}$th of his income and expenditure of B is $\frac{4}{9}$th of his income and sum of their saving is Rs 1950 then find the difference between their income?
(a) Rs 900 (b) Rs 1000 (c) Rs 880
(d) Rs 960 (e) Rs 920

59. A alone can do a work in 12 days while A and B together can do that work in 7.5 days. Find the time taken by C alone to do that work if C takes 3 days more than that of B alone to do that work?
(a) 33 days (b) 30 days (c) 23 days
(d) 27 days (e) 28 days

60. Ratio of base and perpendicular side of a right-angled triangle is 3:4 and its base is equal to the side of a square having area 81 cm^2. Find the perimeter of the triangle?
(a) 30 cm (b) 36 cm (c) 33 cm
(d) 42 cm (e) 40 cm

Directions (61-65): In each of these questions, two equations (I) and (II) are given. You have to solve both the equations and give answer
(a) if x>y
(b) if x≥y
(c) if x<y
(d) if x ≤y
(e) if x = y or no relation can be established between x and y.

61. **I.** $x^2 - 13x + 40 = 0$
II. $2y^2 - y - 15 = 0$

62. **I.** $5x^2 + 17x + 6 = 0$
II. $2y^2 + 11y + 12 = 0$

63. **I.** $7x^2 - 19x + 10 = 0$
II. $8y^2 + 2y - 3 = 0$

64. **I.** $x^2 - 8x + 15 = 0$
II. $y^2 - 3y + 2 = 0$

65. **I.** $3x^2 - 7x + 4 = 0$
II. $2y^2 - 9y + 10 = 0$

66. A person travels half of the distance at the speed of x km/h and remaining half of the distance at 4x km/h. Find the value of 'x' if the average speed is 36.8 km/h?
(a) 21 (b) 25 (c) 24
(d) 23 (e) 20

67. A, B and C invested in a ratio of 7: 8: 5 in a business. They got an annual profit of Rs. 136800. If A and C withdrew their amount at the end of 3 months and 7 months respectively. Then find the difference between A and C's share of profit?
(a) Rs. 12,600 (b) Rs. 11,500 (c) Rs. 13,500
(d) Rs. 10,500 (e) Rs. 13,000

68. Retailer sold one article at $33\frac{1}{3}\%$ profit and another at 100% profit. Find his overall profit percentage if the selling price of both the article is same?
(a) 60% (b) 55% (c) $66\frac{2}{3}\%$
(d) 75% (e) $56\frac{2}{3}\%$

69. A mixture has milk and water in the ratio 4: 1. When 50% of the mixture is taken out and replaced by 24 liters of water then the ratio of milk to water in the mixture becomes 1: 1. Find initial quantity of mixture.
(a) 80 liters (b) 45 liters (c) 70 liters
(d) 60 liters (e) 75 liters

70. 4 years ago, ratio of Shivam's age to Deepak's age was 2: 3 and ratio of Shivam's age 4 years ago to Deepak's age 5 years hence is 8: 15. Find present age of Shivam.
(a) 32 years (b) 28 years (c) 40 years
(d) 24 years (e) 36 years

English Language

Directions (71-78): Read the following passage and answer the following questions based on the given passage. Some of the words are highlighted which would help you to answer some of the questions given.

For years, world-wide organisations have become increasingly excited about the prospect of a cloud-based future. As the dream becomes an ever closer reality for many kinds of business and, Forrester predicted that enterprise spending on cloud services is **set to surge**. IDC also predicted that global spending on public cloud services and infrastructure would reach $210bn in 2019, an increase of 24% from 2018. But one obstacle stands create friction and introduce risk: the process of migration. As all indications point to a **massive** shift in data deployments to the cloud, it is more important than ever that the transition from on-premises to Cloud is as risk free as possible. In today's climate any loss or disruption to data can have a huge business impact. It's a complex process, is frequently underestimated and many organisations have found there's lots that can go wrong that can impact the business.

Organisations across the globe have found the cloud to be an ideal place to run modern data applications due to big data's elastic resource requirements. Furthermore, with the lack of data talent an ever-looming issue for most companies today they have been determined to **adopt** a cloud-first strategy to ensure business operations are accessible for a range of employees.

The cloud offers great promise for developers especially, as it can increase the speed at which they develop software features and increase the resilience of applications once they are deployed - along with enhanced security through the use of multiple server locations. With all this considered, it is no surprise that 42% of UK businesses leverage some kind of cloud service, according to Eurostat. However, all the perceived benefits of leveraging the cloud are redundant if organisations come up against barriers to accessing cloud services. Cloud-based data pipelines still suffer from complexity challenges at the moment, along with the lack of visibility into cost and resource usage at the application and user level. The answer to this is automation fueled by robust Machine learning training models and artificial intelligence. These concepts and the tools that enable them can determine the prerequisites of cloud infrastructure, application dependencies,the appropriate target cloud instance profiles, and provide troubleshooting in real-time.

To summarise, the promise of the cloud has created a sense of excitement amongst enterprises, however, they have proceeded to go **full steam** ahead into adopting a cloud service, without sufficient data to **ensure** performance service level agreements (SLAs).

71. How can we tackle the risks associated with the process of migration?
(a) By ensuring that organisations only migrate the apps to the cloud that will thrive in the cloud.
(b) The surge in the investment in the cloud technology.
(c) The use of predictive power of Artificial Intelligence.
(d) The transition from on-premises to Cloud
(e) None of these

72. Why the promise of the cloud has created a sense of excitement amongst enterprises?
(a) As it ensures that business operations are accessible for a range of employees.
(b) As the enterprise spending on cloud services is surging.
(c) Reduction in the cost of operation it may entail.
(d) The secure platform it provides to the data it stores.
(e) None of these

73. How the process of migration stands as an obstacle to the cloud technology?
(a) The expensive cost of providing safety to the data.
(b) The lack of sound technology in Artificial Intelligence.
(c) Complexities of the data migrated to the cloud
(d) It exposes the companies to the risk of losing important information.
(e) None of these

74. Which of the following statement(s) is/are correct in context of the passage?
(1) The cloud technology can help in increasing the speed at which the software features are developed.
(2) There is no risk associated with the cloud technology.
(3) Cloud technology is not a very complex process.
(a) Only (2)
(b) Both (1) and (2)
(c) Only (3)
(d) Only (1)
(d) All are correct

75. What is the meaning of the phrase "full steam ahead" ?
(a) Interrupting an activity
(b) Acting cautiously
(c) Great increase
(d) Progressing quickly.
(e) Prudent progression

76. Which of the following words is most similar to the word "ADOPT" as given in the passage?
(a) mold (b) deduce (c) Embrace
(d) Creative (e) Fluster

77. Which of the following words is most similar to the word "ENSURE" as given in the passage?
(a) Confirm
(b) Paced
(c) Redundant
(d) Weaken
(e) Reject

78. Which of the following words is most OPPOSITE to the word
"MASSIVE" as given in the passage?
(a) Prominent
(b) Insignificant
(c) Enlarged
(d) Filthy
(e) Vouch

Directions (79-85): Read each sentence to find out if there is any error in it. The error, if any will be in one part of the sentence. The number of that part is the answer if there is no error, the answer is (e).

79. It is widely believe (a)/ that the village which is situated on the (b)/ eastern coast of India will be wiped out (c)/ within a decade. (d)/ No error. (e)

80. Yesterday I met (a)/ an old friend (b)/ when I am going (c)/ to the market. (d)/ No error.(e)

81. The criminal was (a)/ sentenced to the (b)/ death and was (c) hung for his crime (d)/ No error.(e)

82. FATF strongly urges (a)/ Pakistan to swiftly complete its action plan (b)/ by October 2019 to stop (c)/ terror funding in the country (d)/ No error.(e)

83. Elon musk is determined (a)/ to be success (b)/ in whatever field (c)/ he chooses. (d)/ No error.(e)

84. New purchasing power will increasingly (a)/ come from Asia and Africa where (b)/ the demographics are still favorable (c)/ for high income growth. (d)/ No error (e).

85. Not only the (a)/ students but also (b)/ the principal were(c)/ laughing at the joke he cracked.(d)/No error (e).

Directions (86-90): In each of the following sentences, there is a blank space. Below in each sentence, there are five words out of which one can be used to fill the blank to make the sentence grammatically and coherently correct. Find the most appropriate word that fit into the blank contextually.

86. There is nothing to indicate the building's past, _____ the fireplace.
(a) except (b) included (c) belonged
(d) barred (e) Foster

87. Two circus elephants that performed together _____ when crossing paths 23 years later
(a) happy (b) believe (c) angered
(d) rejoiced (e) greater

88. The law _____ farmers not only to save and resow (multiply) seeds, but also to sell them to other farmers, no matter what the original source of the seed is.
(a) coverts (b) implements (c) emits
(d) permits (e) deserts

89. Small farmers must be educated and _____ with proper incentive structures, to engage with agriculture.
(a) fascinated
(b) encouraged
(c) discouraged
(d) harvested
(e) invited

90. Raipur despite being _____ between two rivers, the Krishna and the Tungabhadra, it is a dust bowl in May first week.
(a) Surrounded
(b) Located
(c) Revealed
(d) Settle
(e) None of these.

Directions (91-95): Given sentences are not in their exact position. Rearrange them to make a coherent paragraph and then answer the questions given below.

A. It can even make exercise more fun and productive.

B. Plus, hearing others laugh, even for no apparent reason, can often trigger genuine laughter.

C. To add simulated laughter into your own life, search for laugh yoga or laugh therapy groups. Or you can start simply by laughing at other people's jokes, even if you don't find them funny.

D. A Georgia State University study found that incorporating bouts of simulated laughter into an exercise program helped improve older adults' mental health as well as their aerobic endurance.

E. Believe it or not, it's possible to laugh without experiencing a funny event—and simulated laughter can be just as beneficial as the real thing.

91. Which of the following should be the FOURTH sentence after the rearrangement?
(a) A (b) B (c) C
(d) D (e) E

92. Which of the following should be the SECOND sentence after the rearrangement?
(a) A (b) B (c) C
(d) D (e) E

93. Which of the following should be the THIRD sentence after the rearrangement?
(a) A (b) B (c) C
(d) D (e) E

94. Which of the following should be the FIRST sentence after the rearrangement?
(a) A (b) B (c) C
(d) D (e) E

95. Which of the following should be the FIFTH sentence after the rearrangement?
(a) A (b) B (c) C
(d) D (e) E

Directions (96-100): In each the following questions four words are highlighted. Choose the option reflecting the word which is either misspelt or grammatically incorrect. If all the highlighted words are correct, choose option (e) i.e. "all are correct" as your answer choice.

96. A British court has **ruled** that British arms **sales** to Saudi Arabia **wear** unlawful on Humanitarian **Grounds**.
(a) ruled (b) sales (c) wear
(d) Grounds (e) All are correct

97. I'm **tyred** of **hearing** politicians making **pious** pronouncements about their **devotion** to the people
(a) tyred (b) hearing (c) pious
(d) devotion (e) All are correct

98. It is likely that weaving **prospered** and partly **relocated** towards areas **within** easy reach of the army **contractors**.
(a) prospered (b) relocated (c) within
(d) contractors (e) All are correct

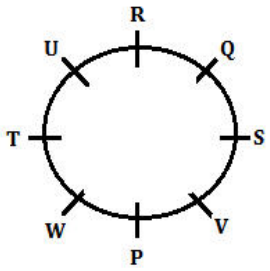
99. This cat and mouse **tactic** was **purposely** designed to provoke, **inrage** and **panic** the unemployed.
(a) tactic (b) purposely (c) inrage
(d) panic (e) All are correct

100. Indian democracy's **robustness** is underscored by high voter **turnouts**, and large number of **candedates** in the **fray**.
(a) robustness (b) turnouts (c) candedates
(d) fray (e) No correction required

Solutions

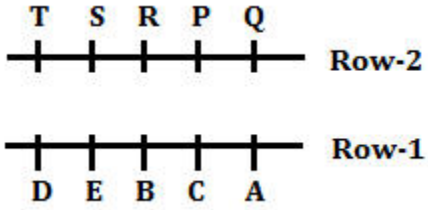
REASONING ABILITY

Direction (1-5):

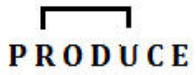


1. (a);
2. (c);
3. (b);
4. (c);
5. (b);

Direction (6-10):

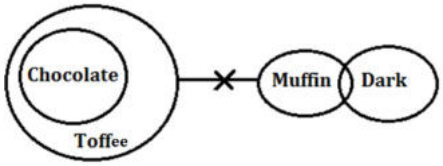


6. (c);
7. (b);
8. (e);
9. (a);
10. (d);
11. (c);

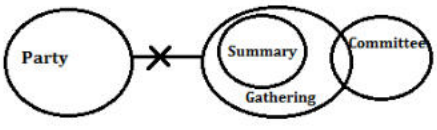


Direction (12-15):

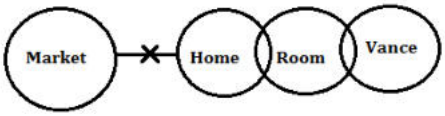
12. (b);



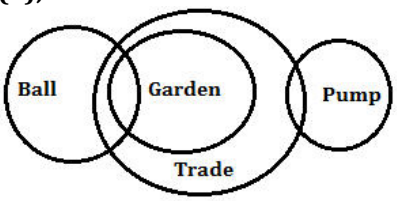
13. (e);



14. (b);



15. (a);



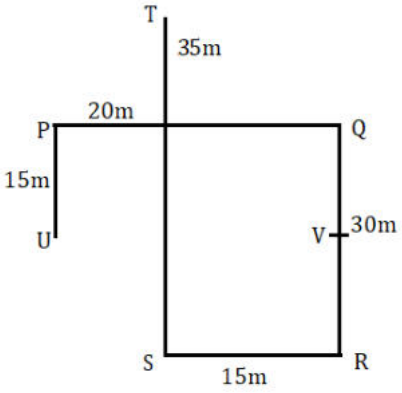
Direction (16-20):

Persons
E
D
A
B
C
G
F

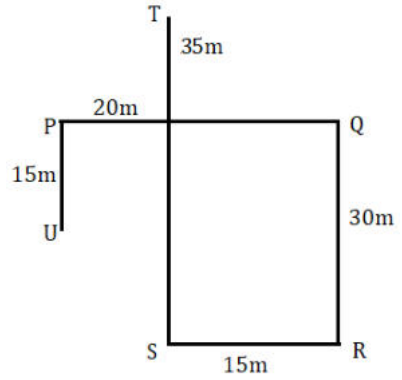
16. (c);
17. (e);
18. (c);
19. (b);
20. (e);

Direction (21-23):

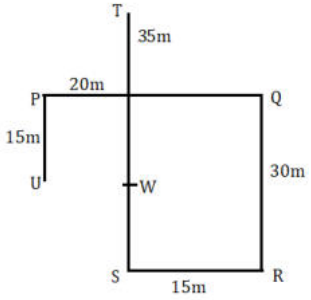
21. (d);



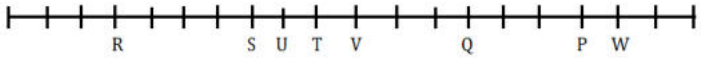
22. (c);



23. (b);



Direction (24-26):



24. (e); **25. (a);** **26. (c);**

27. (b); One word formed- lent

Direction (28-30):

28. (e); **I.** E < B (True) **II.** G > E (True)

29. (a); **I.** Q > P (True) **II.** V < R (False)

30. (b); **I.** T ≤ P (False) **II.** N < L (True)

Direction (31-35):

31. (d); M

32 (d); Y

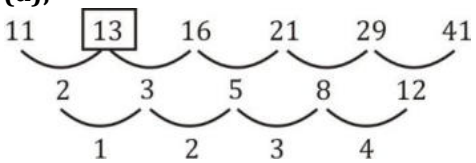
33. (b); One–@2I

34. (a); One – 2U&

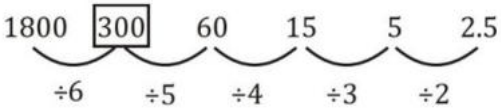
35. (e); 8EL

Quantitative Aptitude

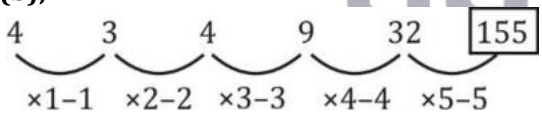
36. (d);



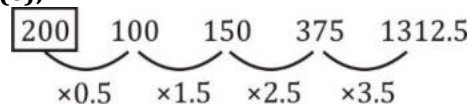
37. (a);



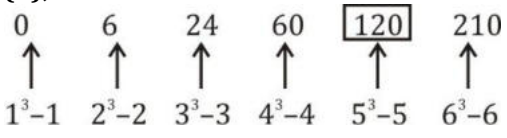
38. (b);



39. (e);



40. (d);



41. (b); Required average = $\frac{72+90+48}{3}$
= 70

42. (a); Required ratio = $\frac{60+90}{90+70}$
= $\frac{150}{160}$ = 15: 16

43. (e); Required % = $\frac{\{(72+48)-72\}}{72} \times 100$
= $\frac{200}{3}\% = 66\frac{2}{3}\%$

44. (b); Required difference = (72 + 90) – (78 + 70)
= 162 – 148
= 14

45. (c); Required % = $\frac{78+72}{60} \times 100$
= $\frac{150}{60} \times 100 = 250\%$

46. (d); $17.28 \div ? = 200 \times 3.6 \times 0.2$
$? = \frac{17.28}{144}$
$= 0.12$

47. (a); $\frac{486}{?} \times \frac{7392}{66} = 1008$
$\frac{486}{?} = \frac{1008}{112}$
$? = \frac{486}{9}$
$? = 54$

48. (e); $\frac{100}{700} \times 4200 \times \frac{1}{24} = (?)^{\frac{1}{2}}$
$25 = (?)^{\frac{1}{2}}$
$? = 625$

49. (c); $? = \frac{90 \times 7 \times 8}{5} = 1008$

50. (b); $? = \frac{0.3125}{2.5}$
$? = 0.125$

51. (b); $\frac{1496}{17} = \frac{?}{100} \times 220$
? = 40

52. (d); $\frac{36}{100} \times 180 \times \frac{10}{4} = ?$
$? = 162$

53. (b); $0.08 \times 555 - 16.4 = ?$
$? = 44.4 - 16.4 \Rightarrow ? = 28$

54. (d); $\frac{35}{100} \times 150 \times 16 + 22 = ?$
$? = 840 + 22 = 862$

55. (c); $\frac{9240}{?} = 330$
$? = 28$

56. (e); Let the sum be Rs 100x
CI in first year= Rs 20x
CI in two years= 44% of 100x= Rs 44x
CI in 2nd year= 44x-20x= Rs 24x
ATQ
24x-20x=1200
x=300
Required sum=Rs 30,000

57. (b); Speed in upstream=18 km/hr
Speed in downstream= 24 km/hr
Required total distance= $(24 + 18) \times 7 =$ 294 km

58. (d); Let income of A and B be Rs 5x and Rs 9x respectively
Expenditure of A=Rs $\frac{15}{8}$x
Saving of A=Rs $\frac{25}{8}$x
Expenditure of B= Rs 4x
Saving of B= Rs 5x
ATQ
$\frac{65}{8}x = 1950 \Rightarrow x=240$
Required difference= Rs 960

59. (c); Let total work be 60 units (LCM of 12 and 7.5)
Efficiency of A= 5 units/ day
Efficiency of A and B together= 8 units/ day
Efficiency of B= 3 units/ day
Time taken by B alone to do that work=20 days
Time taken by C alone=23 days

60. (b); Side of the square=9 cm
Perpendicular side of the triangle= 12 cm
Hypotenuse of the triangle=$\sqrt{81 + 144} = \sqrt{225} =$ 15 cm
Perimeter of the triangle= 36 cm

61. (a); **I.** $x^2 - 13x + 40 = 0$
$x^2 - 5x - 8x + 40 = 0$
$x(x - 5) - 8(x - 5) = 0$
$x = 5, 8$
II. $2y^2 - y - 15 = 0$
$2y^2 - 6y + 5y - 15 = 0$
$2y(y - 3) + 5(y - 3) = 0$
$y = 3, -5/2$
$x > y$

62. (e); **I.** $5x^2 + 17x + 6 = 0$
$5x^2 + 15x + 2x + 6 = 0$
$5x(x + 3) + 2(x + 3) = 0$
$x = -3, -\frac{2}{5}$
II. $2y^2 + 11y + 12 = 0$
$2y^2 + 8y + 3y + 12 = 0$
$2y(y + 4) + 3(y + 4) = 0$
$y = -4, -\frac{3}{2}$
No relation

63. (a); **I.** $7x^2 - 19x + 10 = 0$
$7x^2 - 14x - 5x + 10 = 0$
$7x(x - 2) - 5(x - 2) = 0$
$x = 2, \frac{5}{7}$
II. $8y^2 + 2y - 3 = 0$
$8y^2 + 6y - 4y - 3 = 0$
$2y(4y + 3) - 1(4y + 3) = 0$
$y = \frac{-3}{4}, \frac{1}{2}$
$x > y$

64. (a); **I.** $x^2 - 8x + 15 = 0$
$\Rightarrow x^2 - 5x - 3x + 15 = 0$
$\Rightarrow x(x - 5) - 3(x - 5) = 0$
$\Rightarrow (x - 3)(x - 5) = 0$
$\therefore x = 3$ or 5
II. $y^2 - 3y + 2 = 0$
$\Rightarrow y^2 - 2y - y + 2 = 0$
$\Rightarrow y(y - 2) - 1(y - 2) = 0$
$\Rightarrow (y - 1)(y - 2) = 0$
$\therefore y = 1$ or 2
$\therefore x > y$

65. (c); **I.** $3x^2 - 7x + 4 = 0$
$\Rightarrow 3x^2 - 4x - 3x + 4 = 0$
$\Rightarrow (3x - 4)(x - 1) = 0$
$x = \frac{4}{3}$ or 1
II. $2y^2 - 9y + 10 = 0$
$\Rightarrow 2y^2 - 4y - 5y + 10 = 0$
$\Rightarrow (2y - 5)(y - 2) = 0$
$\Rightarrow y = \frac{5}{2}$ or 2
$y > x$

66. (d); Let the distance be D km
ATQ
$\frac{D}{\left(\frac{D}{2x} + \frac{D}{8x}\right)} = 36.8$
x=23

67. (a); Ratio of their profit sharing
A: B: C = $7 \times 3 : 8 \times 12 : 5 \times 7 = 21 : 96 : 35$
Annual profit = 136800
Difference b/w A and C's share of profit
$= \frac{14}{152} \times 136800$
= Rs 12,600

68. (a); Let SP of both article = 8x
ATQ,

	Article 1	Article 2		
CP	6x (×3/4)	4x (×1/2)	=	10x
SP	8x	8x	=	16x

Profit % $= \frac{16x-10x}{10x} \times 100 = 60\%$

69. (a); Let initial quantity of milk and water in the mixture be '40x liters' and '10x liters' respectively.
ATQ,
$\frac{\left(40x\times\frac{1}{2}\right)}{10x\times\frac{1}{2}+24} = \frac{1}{1}$
$\frac{20x}{5x+24} = \frac{1}{1}$
20x = 5x + 24
15x = 24
x = 1.6
So, required quantity = 40x + 10x
= 50x
= 80 liters

70. (b); Let age of Shivam and Deepak 4 years ago be '2x years' and '3x years' respectively.
ATQ,
$\frac{2x}{3x+4+5} = \frac{8}{15}$
$\frac{2x}{3x+9} = \frac{8}{15}$
30x = 24x + 72
6x = 72
x = 12
So, present age of Shivam = 2x + 4
= 28 years

English Language

71. (c); Refer the last few lines of the 5th paragraph of the passage, "The answer to this is automation fueled by robust Machine learning training models and artificial intelligence……. provide troubleshooting in real-time."

72. (a); Refer the 3rd paragraph of the passage, "Furthermore, with the lack of data talent an ensure business operations are accessible for a range of employees."

73. (d); Refer to the 2nd line of the 2nd paragraph of the passage, "In today's climate any loss or disruption to data can have a huge business impact."

74. (d); Statement (1) is correct. Refer the 4th paragraph of the passage, "The cloud offers great promise for developers the use of multiple server locations"

75. (c); If something such as a plan or a project goes full steam ahead, it progresses quickly.

76. (c); Embrace means accept (a belief, theory, or change) willingly and enthusiastically hence it is similar in meaning to adopt.

77. (a); Ensure means make certain that (something) will occur or be the case hence confirm is the word which is most similar in meaning.

78. (b); Massive means exceptionally large hence insignificant is the word which is most opposite in meaning.

79. (a); There is an error in part (a) of the sentence in place of "believe" we will use "believed".

80. (c); There is an error in part (c) of the sentence.
In place of "am" we will use "was" because the events of the sentences are in past.

81. (d); Use "hanged" in place of "hung"

82. (e); There is no error in the sentence.

83. (b); There is an error in part (b) of the sentence. Use "to succeed" in place of "to be success" because after "determined" we use "to infinitive".

84. (e); There is no error in the sentence.

85. (c); Replace 'were' with was'.
When two subjects are joined by 'not only...but also', the verb must agree with the second subject.
The correct sentence should be: "Not only the students but also the principal was laughing at the joke he cracked.
The same rule applies when two subjects are joined by 'or', the verb must agree with the second subject.
For e.g. Krish and his brothers were there. (Second subject is 'plural') Mohan or Sohan is responsible for this. (Second subject is 'singular')

86. (a); "Except" which means "not including" is the word which should fit the
blank.

87. (d); "Rejoiced" which means feel or show great joy or delight will fit the blank most appropriately.

88. (d); Here, "permits" which means "officially allow (someone) to do something" perfectly fits in the given blank making the sentence grammatically correct and contextually meaningful. Hence, option (d) is the most suitable answer choice.
Coverts: a thicket in which game can hide.
Implements: put (a decision, plan, agreement, etc.) into effect.

Emits: produce and discharge (something, especially gas or radiation).
Deserts: what a person deserves with regard to reward or (more usually) punishment.

89. (b); Here, "encouraged" which means "give support, confidence, or hope to (someone)" perfectly fits in the given blank making the sentence grammatically correct and contextually meaningful. Hence, option (b) is the most suitable answer choice.
Fascinated: strongly attracted and interested.
Discouraged: having lost confidence or enthusiasm; disheartened. Harvested: gather (a crop) as a harvest.
Invited: make a formal or polite request for (something) from someone

90. (b); 'Surrounded' should be followed by 'By' or 'with', hence it is an incorrect option. Also, option (d) is grammatically incorrect and option (c) doesn't make a meaningful sentence. So, option (b) is the only option which makes the sentence both meaningfully and grammatically correct. Hence, option (b) is the most suitable answer choice.

91. (b); The correct sequence for the given sentences is EADBC.

92. (a); The correct sequence for the given sentences is EADBC.

93. (d); The correct sequence for the given sentences is EADBC.

94. (e); The correct sequence for the given sentences is EADBC.

95. (c); The correct sequence for the given sentences is EADBC.

96. (c); "Were" should be used in place of "wear"

97. (a); Correct Spelling is Tired

98. (e); All the given words are correct.

99. (c); The correct spelling is "enrage"

100.(c); From the given highlighted words, 'Candedates' is misspelled, correct spelling is 'Candidates' Hence, option (c) is the correct answer.

Mock 10

SBI Clerk Prelims 2018

REASONING ABILITY

Direction (1 – 3): Read the information carefully and answer the questions:

A company ABC printed different number of books in different years 1947, 1956, 1987, 1998, 2002 such that number of books printed are not same in any year. 66 books were printed in an odd numbered year which is not 1947.The number of books printed in 1947 is 10 less than that printed in 1987. 59 books were printed in an year before the year in which 61 books are printed but not immediate before. The number of books printed in 2002 is 2 more than that printed in 1998.

1. How many books were printed in 1947?
(a) 56 (b) 66 (c) 63
(d) 61 (e) none of these

2. What is the difference between the number of books printed in 1956 and 2002?
(a) 7 (b) 10 (c) 8
(d) 4 (e) none of these

3. In how many years the number of books printed are more than that printed in 1998?
(a) two (b) one (c) none
(d) three (e) four

4. How many words can be formed from the 1st, 6th, 8th and 9th letter of a word 'EMANICIPATE' by using each letter once in the word?
(a) two (b) one (c) none
(d) three (e) more than three

5. If all the letters in the word FIGURES are arranged in alphabetical order from left to right in such a way that vowels are arranged first followed by consonants, then how many letters are there in between U and R after the arrangement?
(a) two (b) one (c) none
(d) three (e) four

6. If in the number 39682147, 1 is added to each of the digit which is less than five and 1 is subtracted from each of the digit which is greater than five then how many digits are repeating in the number thus formed?
(a) two (b) one (c) none
(d) three (e) four

Direction (7 – 8): Read the information given below and answer the questions.
All the given members belong to the same the family. J is the brother of L. J is the only son of R. W is the father-in-law of L. D is the maternal grandfather of P, who is a male. Q is the only son of W. W is the grandfather of N and C is the daughter of N.

7. How L is related to C?
(a) Mother (b) Son (c) Brother
(d) Father (e) None of these

8. How is P related to N?
(a) Mother (b) Son (c) Brother
(d) Father (e) None of these

Direction (9 – 11): Read the information carefully and answer the question:
Point U is 10m north of point Q. Point T is 10m east of point U. Point S is 15m south of point T. Point P is 20m south of point Q. Point R is 25m east of point P. Point L is 15m east of point S. Point M is the midpoint of point U and P.

9. What is the distance between point L and R?
(a) 10m (b) 15m (c) 5m
(d) 20m (e) 25m

10. In which direction is point T with respect to P?
(a) north-west
(b) south-west
(c) south-east
(d) north-east
(e) none of these

11. Which of the following points are inline?
(a) P, R, S (b) Q, M, L (c) U, S, T
(d) M, S, L (e) Q, S, L

Directions (12–16): Read the following information carefully and answer the given questions.
Twelve persons sitting in two rows. D, E, F, K, L and M sitting in row-1 and facing north. S, T, U, X, Y and Z sitting in row-2 and facing south direction. E sits third from one of the extreme ends. S sits second to the left of the one who faces E. Only three persons sit between S and T. K sits somewhere right of M. More than three persons sit between X and T. F faces one of the immediate neighbours of T. Z sits second to the right of Y. The one who faces L sits third to the left of U. D faces S.

12. Who among the following faces K?
(a) T (b) S (c) X
(d) Y (e) none of these

13. Who among the following faces the immediate neighbor of M?
(a) Z (b) K (c) D
(d) L (e) None of these

14. Four of the following five from a group, which among the following does not belong to this group?
(a) T, E (b) U, D (c) Y, L
(d) Z, E (e) Z, K

15. Who among the following faces the one who sit to the immediate left of Y?
(a) U (b) D (c) X
(d) Z (e) none of these

16. How many persons sit between M and D?
(a) one (b) two (c) three
(d) five (e) four

Direction (17): Five people A, B, X, Y, and Z live on five different floors of a building (such as ground floor numbered as 1 and top is numbered as 6). There are three floors between A and B. X lives one of the floors above Y.

17. Who among the following lives on third floor?
(a) B (b) A (c) X
(d) Z (e) Cannot be determined

18. Which of the following elements should come in a place **'?'** ?
AB3 CE6 FI10 JN15 ?
(a) OT20 (b) TO21 (c) OT21
(d) TS21 (e) None of these

Directions (19–21): Each of the questions below consists of a question and two statements numbered I and II given below it. You have to decide whether the data provided in the statement are sufficient to answer the question. Read both the statements and
Given answer:
(a) If the data in statement I alone are sufficient to answer the question, while the data in statement II alone are not sufficient to answer the question.
(b) If the data in statement II alone are sufficient to answer the question, while the data in statement I alone are not sufficient to answer the question.
(c) If the data either in statement I alone or in statement II alone are sufficient to answer the question.
(d) If the data even in both statements I and II together are not sufficient to answer the question.
(e) If the data in both statement I and II together are necessary to answer the question.

19. Who sits immediate to the left of Ravi, who is sitting in row. All the persons who are sitting in a row facing north direction?
I. There are only two persons sit between Sahil and Geeta. More than three persons sit to the left of Geeta.
II. Not more than 8 persons can sit in a row. Ravi sits second to the left of Sahil. Diya sits 6 places away from Geeta.

20. What is the code of 'right' in a certain code language?
I. The code of 'every right to reject' is '%47 *32 $53 *95',
II. The code of 'never reject right turn' is '%62 %47 $51 *32'.

21. Find the number of boys and number of girls in the row?
I. R sits 18th from left end of the row and Y sits 11th from the right end of the row. R and Y interchange their positions, after interchanging the position R's position is 20th from left end.
II. Total 43 students are in the row and all are facing is same direction.

Directions (22–26): Study the following arrangement carefully and answer the questions given below:
B 5 R 1 @ E K 4 F 7 © D A M 2 P 3 % 9 H I W 8 * 6 U J $ V Q #

22. Which of the following is the fifth to the left of the seventeenth from the left end of the above arrangement?
(a) D (b) W (c) *
(d) 4 (e) None of these

23. Which of the following is exactly in the middle between D and U in the above arrangement?
(a) % (b) H (c) 9
(d) 3 (e) None of these

24. Four of the following five are alike in a certain way based on their position in the above arrangement and so form a group. Which is the one that does not belong to that group?
(a) R1E (b) F7D (c) M23
(d) 9HW (e) UJ6

25. How many such symbols are there in the above arrangement each of which is immediately preceded by a number but not immediately followed by a consonant?
(a) None (b) One (c) Two
(d) Three (e) More than three

26. Which of the following is the tenth to the left end of the thirteenth from the right end?
(a) F (b) M (c) @
(d) % (e) 3

Direction (27–28): Read the information carefully and answer the questions:

Eight persons A, B, C, D, E, F, G, H are sitting around a circular table facing centre. H faces B. Two persons sit between F and B. E sits 2nd right to D. F sits 2nd right to C, who is one of the immediate neighbors of G. C is not an immediate neighbor of B.

27. Who among the following sits 3rd left to F?
(a) D (b) C (c) B
(d) A (e) none of these

28. Who among the following faces A?
(a) D (b) C (c) B
(d) G (e) none of these

Directions (29-30): Study the following information carefully and answer the given questions.
In a certain code language,
'good key friends' is coded as 'xo pe cm'
'key law found' is coded as 'xo og bt'
'data key good' is coded as 'tu xo pe'

29. Which of the following is the code for 'good'?
(a) xo (b) pe (c) tu
(d) cm (e) None of these

30. Which of the following word is coded as 'og'?
(a) law (b) good (c) found
(d) Either (a) or (c) (e) key

Directions (31-35): The following questions are based on the six three digits numbers given below:
563 218 732 491 929

31. If 2 is subtracted from the second digit of all odd numbers and 2 is added in the first digit of all even numbers, then which number is lowest number after the arrangement?
(a) 218 (b) 732 (c) 491
(d) 929 (e) None of these

32. If third digit of highest number is divided by the first digit of lowest number, then what will be the resultant?
(a) 4 (b) 6 (c) 4.5
(d) 5 (e) None of these

33. If all the digits in each number are arranged in increasing order, then which number will be the highest number after the rearrangement?
(a) 218 (b) 732 (c) 491
(d) 563 (e) None of these

34. How many numbers will be there in the given series in which addition of first and third digit is greater than second digit?
(a) One (b) Two (c) Three
(d) Four (e) None of these

35. How many numbers will be there in the given series in which difference of first and third digit is greater than second digit?
(a) One (b) Two (c) Three
(d) Four (e) None of these

QUANTITATIVE APTITUDE

36. Value A is three times of value B. If value of C is 62.5% of difference between value of A and B, then value C is what percent of B?
(a) 120% (b) 125% (c) 115%
(d) 110% (e) 105%

37. A is 40% more efficient than B and both can complete a work in 20 days. A and B start work and do it for eight day. If remaining work is complete by C in 24 days, then find in how many days C will complete work alone?
(a) 30 days (b) 24 day (c) 20 days
(d) 16 days (e) 40 days

38. The length of rectangle is thrice the side of square. Difference between perimeter of rectangle and square is 40 cm. If breadth of rectangle is 8 cm, then find area of square?
(a) 169 cm^2 (b) 121 cm^2 (c) 196 cm^2
(d) 144 cm^2 (e) 256 cm^2

39. In a mixture the ratio of milk and water is 7 : 5. When 56 litres of water is added to this mixture the ratio of milk and water in mixture becomes 7 : 3. Find the initial quantity of milk and water?
(a) 144 liters (b) 120 liters (c) 116 liters
(d) 140 liters (e) 160 liters

40. A man invested Rs 8400 at the rate R% on SI for two years and gets a total interest of Rs. 2016. If he invested Rs. 600 more amount on half of the previous rate of interest for two years, then find the interest get by man?
(a) 960 Rs. (b) 840 Rs. (c) 1080 Rs.
(d) 1020 Rs. (e) 1040 Rs.

Direction(41 – 45): Data given about total number of students visited three towns, read the data carefully and answer the question:

There are 400 students visited three towns A,B and C. Out of total students 20% visited only town A, students visited only town B are 15% less than that of students visited only town A. 18% of total students visited only town C. Student visited town both A & B but not C are 8 less than students visited only town B, students visited town B & C but not A are half the students visited town A & B but not C. Students visited A & C but not B are half the sum of students visited only Town B and only town C together, remaining students visited all the three towns.

41. Find the total number of students visited at least two town?
(a) 180 (b) 106 (c) 160
(d) 140 (e) 120

42. Total students visited town A is how much more than total students visited town C?
(a) 48 (b) 40 (c) 38
(d) 36 (e) 30

43. Total students who visited all the three towns is what percent of total students visited town B & C but not A?
(a) $33\frac{1}{3}\%$ (b) $14\frac{2}{7}\%$ (c) $16\frac{2}{3}\%$
(d) $66\frac{2}{3}\%$ (e) $60\frac{2}{3}\%$

44. Total students visited only town C is what percent less than total students visited only town A?
(a) 10% (b) 12% (c) 15%
(d) 8% (e) 18%

45. Find the ratio between total students visited only town B & only town C together to students visited only town A?
(a) 4 : 5 (b) 7 : 4 (c) 7 : 2
(d) 7 : 5 (e) 7 : 3

Direction (46 – 50): What will approximate value come at the place of question mark:

46. $\frac{11.98 \times 15.89 + \sqrt[3]{215.98}}{\sqrt{288.98}} - \frac{?}{51.98 \times 2 - 52.98} = 0$
(a) 485 (b) 459 (c) 559
(d) 594 (e) 694

47. 12.98 % of 399.98 + $\sqrt{?} = \frac{1.98}{2.93}$ of 125.98
(a) 1024 (b) 1296 (c) 961
(d) 900 (e) 848

48. $567.93 + 455.97 - ? = (27.98)^2$
(a) 120 (b) 180 (c) 160
(d) 220 (e) 240

49. $124.99 \times \frac{\sqrt[3]{?}}{24.99} + 6.02 \times 8.98 = (7.99)^2$
(a) 6 (b) 8 (c) 4
(d) 5 (e) 7

50. $\sqrt{?} + 135.98 = \frac{4.98}{7.89}$ of 319.98
(a) 3025 (b) 2205 (c) 4096
(d) 4098 (e) 4047

51. A boat travels110 km downstream and come back upstream in total 32 hours, if speed of stream is 62.5% less than speed of boat in still water then find the speed of stream?
(a) 5 km/hr (b) 3 km/hr (c) 7 km/hr
(d) 8 km/hr (e) 10 km/hr

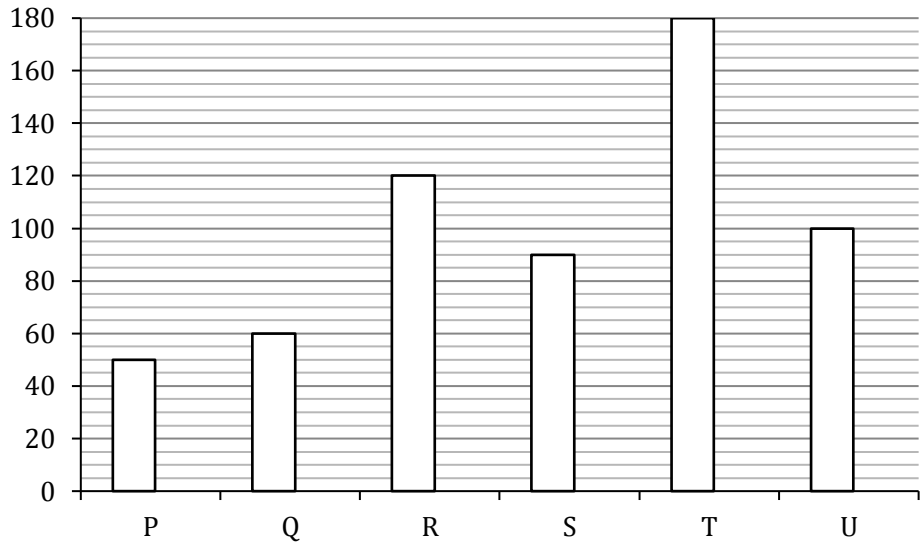
52. A and B invested total Rs. 20,000 and start a business. If 'B' gets total profit of Rs. 4500 and ratio between profit share of B and total profit is 9 : 16, then find amount invested by A if both A and B invested for same time period?
(a) 8250 Rs. (b) 8060 Rs. (c) 8450 Rs.
(d) 8560 Rs. (e) 8750 Rs.

53. A 120 meters long train cross a pole in 4.8 sec, then find in what time train will cross a platform, whose length is three times of the length of the train?
(a) 19.2 sec (b) 18.6 sec (c) 12.8 sec
(d) 20.4 sec (e) 26.8 sec

54. Four years ago, Tina is 18 years younger than Ruchi. If present total age of Ruchi and Tina is 50 years, then find the ratio between present age of Tina to present age of Ruchi?
(a) 9 : 17 (b) 17 : 8 (c) 17 : 9
(d) 6 : 17 (e) 8 : 17

55. A shopkeeper marked up an article 40% above its cost price and gave two successive discounts of 25% and 10% respectively. If he made a loss of Rs. 352, then find the cost price of the article?
(a) 5600 Rs. (b) 5000 Rs. (c) 6400 Rs.
(d) 6800 Rs. (e) 7200 Rs.

Directions(56 – 60): Given below bar graph shows total number of books sold by six book stores P, Q, R, S, T and U on 15 April 2015. Read the data carefully and answer the question:



56. If ratio between books sold by store R on 15 April, 2015 and on 15 May, 2015 is 15 : 21. 75% of total books sold on 15 May, 2015 are comic books, then find total books sold on 15 May,2015 which are not comic books?
(a) 36 (b) 42 (c) 48
(d) 52 (e) 56

57. Total books sold by store T on 15 April, 2015 is what percent more than total books sold by store U on 15 April, 2015?
(a) 80% (b) 60% (c) 40%
(d) 70% (e) 80%

58. Find difference between average number of books sold by store R & S on 15 April, 2015 and average number of books sold by store Q & U on 15 April, 2015?
(a) 40 (b) 25 (c) 35
(d) 56 (e) 60

59. Total books sold by store R on 15 April,2015 is what percent less than total book sold by store T on 15 April, 2015?
(a) $22\frac{1}{3}\%$ (b) $20\frac{1}{3}\%$ (c) $25\frac{1}{3}\%$
(d) $28\frac{1}{3}\%$ (e) $33\frac{1}{3}\%$

60. Total books sold by store T on 15 May, 2015 are 20% more than total books sold by same store on 15 April, 2015, then find total number of books sold by T on 15 May, 2015?
(a)332 (b) 216 (c) 244
(d) 264 (e) 316

Direction(61 – 70) : What will come at the place of question mark:

61. 40% of 50% of 60% of 1200 = ? + 5^3
(a) 21 (b) 23 (c) 24
(d) 19 (e) 27

62. $(12)^2 + (15)^2 + ?\ \%$ of $200 = (22)^2 - 5$
(a) 55 (b) 45 (c) 35
(d) 30 (e) 65

63. 145 % of 180 + ? % of 320 = 741
(a) 180 (b) 130 (c) 120
(d) 140 (e) 150

64. $4^6 \div 16^2 \times \sqrt{16} = ?$
(a) 56 (b) 60 (c) 64
(d) 72 (e) 68

65. $(\sqrt{529} - \sqrt{289}) \times 12 = 136 - ?^2$
(a) 8 (b) 10 (c) 12
(d) 16 (e) 20

66. 45% of 160 + ? % of 180 = 19 % of 900
(a) 50 (b) 55 (c) 65
(d) 45 (e) 35

67. $13\frac{2}{3} - 7\frac{1}{4} = ? + 1\frac{1}{2}$
(a) $5\frac{11}{12}$ (b) $7\frac{11}{12}$ (c) $4\frac{11}{12}$
(d) $9\frac{11}{12}$ (e) $11\frac{11}{12}$

68. $\frac{18\times11+232.5}{17\times9-30} = ?$
(a) 2.4 (b) 4.5 (c) 2.5
(d) 3.5 (e) 6.5

69. 8.4% of 300 + 4. 8% of ? = 102
(a) 1200 (b) 800 (c) 600
(d) 1800 (e) 1600

70. 734 + ? = 12.8 × 64
(a) 80.2 (b) 85.2 (c) 84.8
(d) 89.5 (e) *78.2*

ENGLISH LANGUAGE

Directions (71-75): In the question given below, some sentences/phrases are given out of which one maybe or may not be grammatically correct. Find the grammatically correct sentence/phrase out of the given options. If all of the given sentences/phrases are correct, mark option (e) i.e. "All are correct" as your answer.

71. (a) Do I knows you?
(b) He gets tough at times.
(c) You must has acknowledged.
(d) We didn't knew.
(e) All are correct

72. (a) Do you know what time it is in Boston?
(b) Won't somebody please help me?
(c) I quit a long time ago.
(d) I had to work hard when I was young.
(e) All are correct

73. (a) She agreed in him that I should go to the meeting.
(b) To tell the truth, I used to smoking two packs a day.
(c) We agrees to leave soon.
(d) I hope my last mail didn't sound too harsh.
(e) All are correct

74. (a) Neither her friends nor Mary were in a talkative mood.
(b) None of the story he tells is true.
(c) He is a cut above the average college student.
(d) I don't wanted to play this game anymore.
(e) All are correct

75. (a) Two against one is not a fair fight.
(b) She accepts criticism from anyone but her parents.
(c) Lend him as much money as he needs.
(d) Do you think I should go alone?
(e) All are correct

Directions (76 – 80): Read the following passage carefully and answer the questions given below them. Certain words/phrases have been printed in bold to help you locate them while answering some of the questions.

Global and transnational processes and practices have been observed to influence and impact various aspects of contemporary education within many geographical contexts, and thus the fields of research related to education and globalization are vast: they are not contained simply within one field or subfield, but can be seen to cross sub-disciplinary borders, in policy studies, curriculum, pedagogy, higher education studies, assessment, and more.

As mentioned previously, modern education can itself be seen as one most basic instance of globalization, connected to increased interdependency of communities around the world in economic and political affairs first **associated** with imperialism and colonialism, and more recently with the capitalist world economy. And as the modern educational system cannot be seen as removed or sealed off from cultural and political-economic processes involved in most conceptualizations of globalization, the impacts of globalization processes upon education are often considered wide-ranging, though many are also controversial.

Major trends: From a functionalist perspective, the globalization of educational systems has been influenced by new demands and desires for educational transferability, of students and educators. In place of dichotomous systems in terms of academic levels and credentialing, curriculum, and assessment, increasing convergence can be observed today, as it is recognized that standardization makes movement of people in education across societies more readily feasible, and that such movement of people can _____ education in a number of ways (to achieve diversity, to increase specialization and the promotion of dedicated research centers, to enhance global employability, and so on). Thus, the mobility and paths of movement of students and academics, for education and better life opportunities, have been a rapidly expanding area of research.

76. Which of the following words is similar in meaning to **associated**?
(a) chisel (b) innate (c) equivocal
(d) eclectic (e) None of these

77. Choose the word that appropriately fits in blank given in the passage.
(a) distinct (b) channelize (c) create
(d) enhance (e) influence

78. Which of the following is the most appropriate title of the passage?
(a) Aspects of contemporary education
(b) Political affairs affecting education
(c) Modern Education
(d) Globalization's Impact on Education
(e) Achieving diversity among nations

79. Which of the following sentences is in accordance with the theme of the passage?
(a) Globalization is understood as a process or condition of contemporary human life, at the broadest level, rather than a single event or activity.
(b) Globalization in education cannot be merely described as harmful or beneficial, but depends on one's position, perspective, values, and priorities.
(c) Global citizenship education has been conceived by political theorists and educational philosophers.

(d) Education held by scholars and political leaders is a key to enhance the modern human condition.
(e) Globalization as a contemporary condition or process clearly shapes education around the globe, in terms of policies and values.

80. According to the passage, in what way the education field is vast?
(a) As it is not confined to any geographical region.
(b) as the impact of globalization on education is wide ranging.
(c) As it has various aspects that increase the dependency on other communities of the world.
(d) both (a) and (b)
(e) All of the above.

Directions (81–85): Each of the sentences given below contains a blank. Identify the most suitable alternative among the five given that fits into the blank to make the sentence logical and meaningful.

81. All this at the time seemed merely strange to Pierre: he felt he could not _____its significance.
(a) appreciate (b) hold on (c) encrypt
(d) grasp (e) overlook

82. History bears several instances of how ambitions of individuals have ruined countries and brought untold _____to the people.
(a) joys (b) injuries (c) miseries
(d) comforts (e) heartaches

83. Labour _____ is not just good for those on the move but it also has a positive effect on the economy.
(a) mobility (b) constancy (c) durabilty
(d) adaptability (e) resilience

84. Sometimes it is not only a book but the book read with an _____review of it that gives us an understanding of a reality.
(a) alert (b) insightful (c) rational
(d) artful (e) obtuse

85. An _____ link exists between democracy and public freedom.
(a) determinable (b) avoidable
(c) inextricable (d) involved
(e) elaborated

Directions (86–90): In the questions given below, there is a sentence in which one part is given in bold. The part given in bold may or may not be grammatically correct. Choose the best alternative among the four given which can replace the part in bold to make the sentence grammatically correct. If the part given in bold is already correct and does not require any replacement, choose option (e), i.e. "No replacement required" as your answer.

86. Despite of the government's protecting, he was the victim of an assassination attempt which killed him.
(a) Despite being the government's protecting
(b) Despite being the government's protection
(c) Despite the government's protection
(d) Despite of the government's protection
(e) No replacement required

87. They feared to spare him **lest he would report** the matter to the king.
(a) lest he would not report
(b) lest he should report
(c) lest he will report
(d) lest he shall report
(e) no replacement required

88. As soon as he finished reading the collect letter, **than he flew into a rage** and tore it into pieces.
(a) than he flown into a rage
(b) then he flown into a rage
(c) then he flew into a rage
(d) he flew into a rage
(e) no replacement required

89. This is perhaps the same car **which ran her over while she was** returning from school.
(a) that ran her over while she was
(b) which run her over while she was
(c) which run her over when she was
(d) that running her over while she was
(e) no replacement required

90. If you **will set your mind** to a goal, you will eventually achieve it.
(a) would set your mind
(b) shall set your mind
(c) set your mind
(d) should set your mind
(e) no replacement required

Directions (91–94): Rearrange the following six sentences (A), (B), (C), (D), (E) and (F) in the proper sequence to form a meaningful paragraph then answer the questions given below them.
(A) The cow made a request to the tiger, "I have got a calf at home and the calf is very hungry."
(B) The tiger was convinced with her plea and allowed her to return to the village.
(C) All the cows became scared and started running towards the village, but one cow was left behind.
(D) The cow said to the tiger, "I will come back after giving my milk to the calf. I promise."
(E) Some cows were grazing in a forest. A tiger pounced upon them.
(F) "It is impossible. Because if I leave you now, you will not come back" said the tiger.

91. Which of the following will be the **SECOND** sentence after rearrangement?
(a) A (b) B (c) C
(d) D (e) E

92. Which of the following will be the **FOURTH** sentence after rearrangement?
(a) A (b) D (c) C
(d) F (e) E

93. Which of the following will be the **THIRD** sentence after rearrangement?
(a) A (b) B (c) F
(d) D (e) C

94. Which of the following will be the **SIXTH (LAST)** sentence after rearrangement?
(a) A (b) B (c) D
(d) F (e) E

Directions (95 – 100): In each question below some sentences/phrases are given which are named A, B, C, D and E. Rearrange the given five sentences/phrases to make a coherent sentence/paragraph. The rearranged sequence of the sentences/phrases will be your answer. If after rearrangement, no option matches, and option (e) i.e. "None of these" is given, mark it as answer.

95. (A) Speaking French
(B) a native speaker
(C) who hear Tom
(D) many people
(E) think he is
(a) DCBAE (b) DCEAB (c) DABCE
(d) DCAEB (e) None of these

96. (A) That Spanish is
(B) one of the most
(C) some people say
(D) in the world
(E) beautiful languages
(a) EDABC (b) BDACE (c) CABED
(d) CBEDA (e) None of these

97. (A) Go to Boston
(B) Jack could not
(C) enough money
(D) with us because
(E) he didn't have
(a) BACED (b) BAEDC (c) BCADE
(d) BADEC (e) None of these

98. (A) Sean had to
(B) pumped because
(C) he had accidentally
(D) have his stomach
(E) eaten some rat poison
(a) AECBD (b) ADBCE (c) ABCDE
(d) ADEBC (e) None of these

99. (A) Graduated from our
(B) English with a native speaker
(C) university has studied
(D) for at least two years
(E) every student who has
(a) DECAB (b) EBCAD (c) EACBD
(d) EADCB (e) None of these

100. (A) About how he
(B) telling Mary the story
(C) being eaten by cannibals
(D) Michael remembers
(E) had escaped from
(a) AEBDC (b) DBAEC (c) DCAEB
(d) ACEDB (e) None of these

Solutions

REASONING ABILITY

Solutions (1–3)

Years	Books
1947	56
1956	59
1987	66
1998	61
2002	63

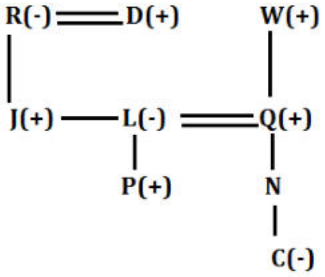
1. (a); 2. (d); 3. (a);

4. (a); The 1st, 6th , 8th and 9th letter of a word 'EMANICIPATE' are E, C, P, A
So, the words formed are PACE and CAPE

5. (a); The given word is- FIGURES
After the rearrangement- EIUFGRS
So, the letters between U and R will be two.

6. (b); The given number is- 39682147
After applied operation- 48573256
So, only digit 5 is repeated in the number thus formed.

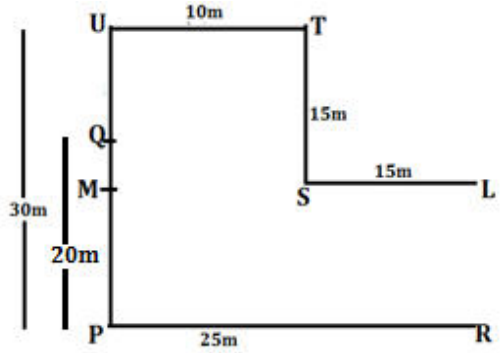
Solutions (7–8)



7. (e);

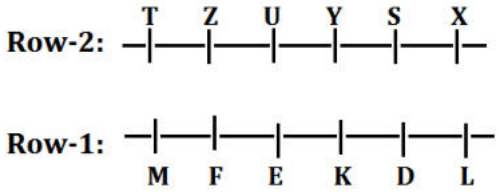
8. (c);

Solutions (9–11):



9. (b); **10. (d);** **11. (d);**

Solution (12–16):



12. (d); **13. (a);** **14. (d);**

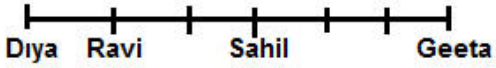
15. (b); **16. (c);**

17. (e);

Floors	Persons
5	A/B
4	X/Z
3	X/Z/Y
2	Z/Y
1	B/A

18. (c); OT21

19. (e); From both the statements I and II we can find that Diya sits immediate to the left of Ravi.



20. (d); right can be coded either %47 or *32.

21. (d);

Solutions (22–26)

22. (a); 5th to left of 17th from left= 17-5= 12th from left = D

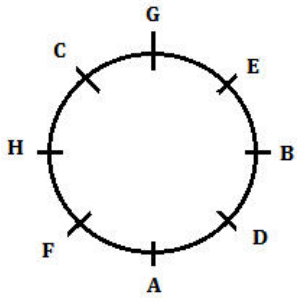
23. (c); 9

24. (e); UJ6

25. (d); 1@, 3%, 8*

26. (a);

Solutions (27–28):



27. (e);

28. (d);

Directions (29–30):

Word	Code
friends	cm
key	xo
good	pe
law/found	og/bt
data	tu

29. (b);

30. (d);

Solution (31–35):

31. (a); 543 418 932 471 909

32. (c); 9/2= 4.5

33. (d); 356 128 237 149 299

34. (d); 563 218 732 929

35. (b); 218 732

QUANTITATIVE APTITUDE

36. (b); Lets A is 3x and B is x
C = $(3x - x) \times \frac{62.5}{100} = 2x \times \frac{5}{8} = 1.25x$
Required percent = $\frac{1.25x}{x} \times 100 = 125\%$

37. (e); A and B ratio of efficiency = 140x : 100x
= 7x : 5x
Total work = 20 (7x + 5x) = 240x units
A and B is eight days = 8 × (7x + 5x) = 96x units
Efficiency of C = $\frac{240x - 96x}{24} = \frac{144x}{24}$ = 6x units/day
C alone = $\frac{240x}{6x}$ = 40 days

38. (d); Lets length of rectangle is 3x meters and side of square x meters
2(3x + 8) – 4x = 40
6x + 16 – 4x = 40
2x = 24 ⇒ x = 12 cm
Area of square = a^2
Area of square = 12^2 = 144 cm^2

39. (a); Let milk and water in mixture be 7x and 5x liters respectively
$\frac{7x+56}{5x} = \frac{7}{3}$
35x – 21x = 168 ⇒ x = 12 liters
initial mixture = (7 + 5) × 12 = 144 *liters*

40. (c); R = $\frac{2016 \times 100}{8400 \times 2}$
R = 12%
New rate = $\frac{12}{2}$ = 6%
interest = $\frac{(8400+600) \times 6 \times 2}{100}$
= 1080 Rs.

Solutions (41 – 45):
Total students visited only town A = $400 \times \frac{20}{100} = 80$
Total students visited only town B = $80 \times \frac{85}{100} = 68$
Total students visited only town C = $400 \times \frac{18}{100} = 72$
Total students visited town A & B but not C = 68 -8
= 60
Total students visited town B & C but not A
= $\frac{60}{2} = 30$
Total students visited A & C but not B = $\frac{68+72}{2} = 70$
Total students visited all the three towns
= 400 – (80 + 68 +72+60+30+70) = 20

41. (a); Total number of students visited at least two towns
= 60 + 30 + 70 + 20 = 180

42. (c); Total students visited town A
= 80 + 60 + 70 + 20 = 230
Total students visited town C
= 72 + 30 + 70 + 20 = 192
Required difference = 230 – 192 = 38

43. (d); Required percentage = $\frac{20}{30} \times 100 = 66\frac{2}{3}\%$

44. (a); Required percentage = $\frac{80 - 72}{80} \times 100 = 10\%$

45. (b); Required ratio = $\frac{68+72}{80} = 7 : 4$

46. (d); $\frac{12 \times 16 + \sqrt[3]{216}}{\sqrt{289}} - \frac{?}{52 \times 2 - 53} = 0$
$\frac{192+6}{17} - \frac{?}{51} = 0$
$\frac{198}{17} - \frac{?}{51} = 0$
$\frac{594 - ?}{51} = 0 \Rightarrow ? = 594$

47. (a); $13 \times 4 + \sqrt{?} = \frac{2}{3} \times 126$
$52 + \sqrt{?} = 84$
$\sqrt{?} = 84 - 52$
$\sqrt{?} = 32 \Rightarrow ? = 1024$

48. (e); $568 + 456 - ? = (28)^2$
$? = 1024 - 784 \Rightarrow ? = 240$

49. (b); $25 \times \frac{\sqrt[3]{?}}{\sqrt{125}} + 6 \times 9 = (8)^2$
$5 \times \sqrt[3]{?} = 64 - 54$
$\sqrt[3]{?} = 2 \Rightarrow ? = 8$

50. (c); $\sqrt{?} + 136 = \frac{5}{8}$ of 320
$\sqrt{?} = 200 - 136$
$\sqrt{?} = 64 \Rightarrow ? = 4096$

51. (b); Let speed of boat in still water and speed of current be 8x km/hr and
3x km/hr respectively
ATQ –
$\frac{110}{8x+3x} + \frac{110}{8x-3x} = 32$
$32x = 32 \Rightarrow$ x = 1 km/h
Speed of stream = 3 × 1 = 3 km/hr

52. (e); Let investment of A is Rs. X then investment of B is Rs. (20,000 – x)
Total profit = $4500 \times \frac{16}{9} = 8000\ Rs.$
ATQ –
$\frac{x}{(20000-x)} = \frac{8000-4500}{4500}$
16x = 140000 ⇒ x = 8750 Rs.

53. (a); Let speed of train is S m/s
S = $\frac{120}{4.8} = 25\ m/s$
Let train will cross the platform in T sec
$25 = \frac{120+120 \times 3}{T}$
25 × T = 480
T = $\frac{480}{25} \Rightarrow$ T = 19.2 sec

54. (e); Four years ago –
$(T - 4) + 18 = (R - 4)$
$R - T = 18$ ... (i)
Given, $R + T = 50$ ... (ii)
From (i) and (ii)
$2R = 68$
$R = 34$ years
$T = 16$ years
Required ratio $= \frac{16}{34} = 8 : 17$

55. (c); Let cost price of article = 100x Rs.
Marked price of article = 140x Rs.
Selling price of Article $= 140x \times \frac{75}{100} \times \frac{90}{100}$
$= 94.5x$ Rs.
ATQ –
$100x - 94.5x = 352$
$5.5x = 352 \Rightarrow x = 64$ Rs.
Cost price $= 64 \times 100 = 6400$ *Rs.*

56. (b); Total books sold on 15 May,2015 which are not comics by store R
$= \frac{120}{15} \times 21 \times \frac{25}{100} = 168 \times \frac{1}{4} = 42$

57. (a); Required percentage $= \frac{180 - 100}{100} \times 100$
$= \frac{80}{100} \times 100 = 80\%$

58. (b); Average number of books sold by store R & S on 15 April, 2015
$= \frac{120+90}{2}$
$= 105$
Average number of books sold by store Q & U on 15 April, 2015
$= \frac{60+100}{2} = 80$
Required difference $= 105 - 80 = 25$

59. (e); Required percentage $= \frac{180-120}{180} \times 100 = 33\frac{1}{3}\%$

60. (b); Total number of books sold by store T on 15 May, 2015
$= 180 \times \frac{120}{100} = 216$

61. (d); $\frac{40}{100} \times \frac{50}{100} \times \frac{60}{100} \times 1200 = ? + 125$
$\frac{2}{5} \times \frac{1}{2} \times \frac{3}{5} \times 1200 = ? + 125$
$? = 144 - 125 \Rightarrow ? = 19$

62. (a); $144 + 225 + \frac{?}{100} \times 200 = 484 - 5$
$2 \times ? = 479 - 369 \Rightarrow ? = 55$

63. (e); $\frac{145}{100} \times 180 + \frac{?}{100} \times 320 = 741$
$261 + \frac{?}{100} \times 320 = 741$
$\frac{?}{100} \times 320 = 741 - 261$
$? = \frac{480 \times 100}{320} \Rightarrow ? = 150$

64. (c); $(2^2)^6 \div (2^4)^2 \times 4 = ?$
$2^4 \times 2^2 = ? \Rightarrow ? = 64$

65. (a); $(23 - 17) \times 12 = 136 - ?^2$
$?^2 = 136 - 72 \Rightarrow ?^2 = 64 \Rightarrow ? = 8$

66. (b); $\frac{45}{100} \times 160 + \frac{?}{100} \times 180 = \frac{19}{100} \times 900$
$72 + \frac{?}{100} \times 180 = 171$
$\frac{?}{100} \times 180 = 171 - 72$
$\frac{?}{100} \times 180 = 99$
$? = \frac{99 \times 100}{180} \Rightarrow ? = 55$

67. (c); $? = (13 - 7 - 1) + \frac{8-3-6}{12}$
$? = 5 - \frac{1}{12} \Rightarrow ? = 4\frac{11}{12}$

68. (d); $\frac{198+232.5}{153-30} = ?$
$? = \frac{430.5}{123} \Rightarrow ? = 3.5$

69. (e); $\frac{8.4}{100} \times 300 + \frac{4.8}{100} \times ? = 102$
$\frac{4.8}{100} \times ? = 102 - 25.2$
$? = \frac{76.8 \times 100}{4.8} \Rightarrow ? = 1600$

70. (b); $? = 819.2 - 734 \Rightarrow ? = 85.2$

ENGLISH LANGUAGE

71. (b); Out of all the given sentences/phrases only the second sentence is grammatically correct. Hence, option (b) is the correct answer.

72. (e); All of the given sentences/phrases are grammatically correct. Hence, option (e) is the correct answer.

73. (d); Out of all the given sentences/phrases only the fourth sentence is grammatically correct. Hence, option (d) is the correct answer.

74. (c); Out of all the given sentences/phrases only the third sentence is grammatically correct. Hence, option (c) is the correct answer.

75. (e); All of the given sentences/phrases are grammatically correct. Hence, option (e) is the correct answer.

76. (e); None of the given words is similar in meaning to 'associated'.

77. (d); The paragraph talks about the impact of globalization on education. Movement of people across the communities for standardizing education is ultimately improving education.
Hence 'enhance' is the most appropriate word to be filled in the blank making the sentence contextually correct.

78. (d); "Globalization's Impact on Education" is the most appropriate title of the passage.

79. (e); Sentence (e) is in accordance with the theme of the passage which is summarizing the whole passage. Other sentences are not delivering the exact explanation.

80. (e); All the sentences are correct in context of the passage.

81. (d); The most appropriate word that would fill the blank is 'grasp' which means seize and hold firmly. Encrypt means conceal data in (something) by converting it into a code. All the other words do not fill the blank appropriately; hence option (d) is the most appropriate choice.

82. (c); The correct option is (c). 'Miseries' is a plural form of noun and it is the only word that fits the blank appropriately.
Miseries mean feelings of great physical or mental distress or discomfort.
Heartaches are the emotional anguish or grieves, typically caused by the loss or absence of someone loved.

83. (a); Option (a) is the correct choice.
Mobility means the ability to move or be moved freely and easily.
Constancy means the quality of being enduring and unchanging.
Durability means the ability to withstand wear, pressure, or damage.
Adaptability means the quality of being able to adjust to new conditions.
Resilience means the capacity to recover quickly from difficulties; toughness.

84. (b); The correct option is option (b).The statement talks about an insightful review of a book that gives an understanding of a reality.
Alert means cautious.
Insightful means perceptive.
Rational means based on or in accordance with reason or logic.
Artful means clever or skillful, especially in a crafty or cunning way.
Obtuse means annoyingly insensitive or slow to understand.

85. (c); Option (c) is the right choice.
Inextricable means inseparable.
Determinable means able to be definitely decided or ascertained.
Elaborated means presented in further detail.

86. (c); The most appropriate phrase to replace the phrase given in bold is "Despite the government's protection". It is to be noted that "despite" does not take any preposition with it. It is always followed with a noun, pronoun or a gerund. Since option (c) is in the precise grammatical syntax, it becomes the most suitable answer choice.

87. (b); The most appropriate phrase to replace the incorrect bold phrase in the sentence is "lest he should report". It is to be noted that 'lest' is followed by 'should' and not 'would'. Therefore, option (b) becomes the most suitable answer choice.

88. (d); The most suitable phrase that should replace the phrase given in bold is "he flew into a rage". It is to be noted that after 'As soon as, So long as, As long as' we do not use 'than'. Except for option (d) none other options are in absolute grammatical syntax. Hence, it becomes the most viable answer choice.

89. (a); The most appropriate phrase to replace the given phrase in bold to make the sentence grammatically correct is "that ran her over while she was". It is to be noted that we will use 'that' in place of 'which' after 'the same' if the verb is clear. Here the word 'was' shows that the verb is clear. Hence, considering the given rationale option (a) becomes the most suitable answer choice.

90. (c); The appropriate phrase to replace the phrase in bold to make the sentence grammatically correct is "set your mind"
It is to be noted that this sentence is an example of First Conditional Sentences. In the case of First Conditional Sentences, we use the simple present tense in the if-clause and simple future tense in the main clause—that is, the clause that expresses the likely outcome. This is how we indicate that under a certain condition (as expressed in the if-clause), a specific result will likely happen in the future. Hence, considering the given option (c) becomes the most suitable answer choice.

Solutions (91–94): The proper sequence of sentences to form a meaningful paragraph will be **ECAFDB**.

91. (c); 92. (d); 93. (a); 94. (b);

95. (d); The correct sequence of the parts to form a grammatically correct and contextually meaningful sentence is DCAEB. Hence, option (d) is the most suitable answer choice.

96. (c); The correct sequence of the parts to form a grammatically correct and contextually meaningful sentence is CABED. Hence, option (c) is the most suitable answer choice.

97. (d); The correct sequence of the parts to form a grammatically correct and contextually meaningful sentence is BADEC. Hence, option (d) is the most suitable answer choice.

98. (b); The correct sequence of the parts to form a grammatically correct and contextually meaningful sentence is ADBCE. Hence, option (b) is the most suitable answer choice.

99. (c); The correct sequence of the parts to form a grammatically correct and contextually meaningful sentence is EACBD. Hence, option (c) is the most suitable answer choice.

100. (b); The correct sequence of the parts to form a grammatically correct and contextually meaningful sentence is DBAEC. Hence, option (b) is the most suitable answer choice.

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Part-III

Mock 11

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REASONING ABILITY

Directions (1-5): To answer these questions study carefully the following arrangement of letters, digits and symbols.

M 7 Σ 8 L P @ ? 6 N B T Y 3 2 = E $ 4 9 © G H 5.

1. How many such letters are there in the arrangement each of which is immediately followed by a number?
(a) Three (b) Four (c) One
(d) Two (e) None of these

2. How many such symbols are there in the arrangement each of which is immediately preceded by a number?
(a) Two (b) Three (c) Four
(d) Nil (e) None of these

3. If all the symbols are deleted from the arrangement, then which of the following will be fourth to the left of the 17th element from the left end?
(a) 9 (b) E (c) 2
(d) Y (e) None of these

4. '78' is related to `P ? 6' and ' ?N' is to`T32'in the same way as'2E'is to…..... in the arrangement.
(a)4©H (b)49G (c)4©G
(d)9GH (e)None of these

5. If all the numbers are deleted from the arrangement then which of the following will be fifth to the right of the 13th element from the right end?
(a) B (b) N (c) Y
(d) T (e) None of these

Directions (6-10): In these questions, a relationship between different elements is shown in the statements(s). The statements are followed by two conclusions. Give answer
(a) if only conclusion I is true.
(b) if only conclusion II is true.
(c) if either conclusion I or II is true.
(d) if neither conclusion I nor II is true.
(d) if both conclusions I and II are true.

6. **Statements :** A > B ≥ C < D, C = E > G
Conclusions : I. D > E **II.** B > E

7. **Statements :** P ≤ Q > M ≥ N, Q = S
Conclusions : I. S > P **II.** N < S

8. **Statements :** S > M = Z > T < Q > V
Conclusions : I. V = S **II.** Q > M

9. **Statements :** T < U = V ≤ S > P ≥ Q
Conclusions : I. S > T **II.** V ≥ Q

10. **Statements :** M ≥ N > R > W, E = J > L ≥ W
Conclusions : I. E > W **II.** M > L

Directions (11-15): The following questions are based on the five three – digit numbers given below:
684 512 437 385 296

11. If 2 is added to the first digit of each of the numbers how many numbers thus formed will be divisible by three?
(a) None (b) One (c) Two
(d) Three (e) None of these

12. If all the digits in each of the numbers are arranged in descending order within the number, which of the following will be the highest number in the new arrangement of numbers?
(a) 684 (b) 385 (c) 296
(d) 437 (e) None of these

13. What will be the resultant number if the second digit of the second lowest number is divided by the third digit of the highest number?
(a) 2 (b) 3 (c) 0
(d) 1 (e) 4

14. If 1 is added to the first digit and 2 is added to the last digit of each of the numbers then which of the following numbers will be the second highest number?
(a) 385 (b) 684 (c) 437
(d) 296 (e) 512

15. If in each number the first and the second digits are interchanged then which will be the highest number?
(a) 296 (b) 512 (c) 437
(d) 684 (e) 385

Directions (16-17): Study the following information carefully and answer the questions given below:
P is to the north of Q and S is to the east of P, who is to the south of W. T is to the west of P.

16. Who among the following is towards south of W and north of Q?
(a) P (b) T (c) S
(d) Q (e) None of these

17. W is in which direction with respect to T?
(a) North (b) Northeast (c) Southwest
(d) West (e) None of these

Directions (18-22): Study the following information carefully and answer the questions given below:
Dhondu, Chintu, Titu, Chiku, Sonu, Monu, Bittu and Sonty are sitting around a circular table facing the center. Sonty is third to the right of Titu and second to the left of Sonu. Chintu is not an immediate neighbor of Sonty and Titu. Monu is second to the right of Chiku and is an immediate neighbor of Titu. Bittu is not the neighbor of Sonu.

18. Who among the following is second to the right of Titu?
(a) Sonty (b) Bittu (c) Monu
(d) Sonu (e) None of these

19. Who among the following is an immediate neighbor of Sonty and Sonu?
(a) Dhondu (b) Chintu (c) Titu
(d) Bittu (e) None of these

20. In which of the following pairs the second person is sitting on the immediate right of the first person?
(a) Dhondu, Sonty (b) Titu, Chiku
(c) Bittu, Sonty (d) Sonu, Sonty
(e) Monu, Titu

21. Who among the following is second to the left of Chintu?
(a) Titu (b) Sonty (c) Monu
(d) Dhondu (e) None of these

22. Who among the following is opposite Chiku?
(a) Dhondu (b) Bittu (c) Sonty
(d) Sonu (e) None of these

Directions (23-27): Study the following information carefully to answer the given questions:
Seven neighbours S, P, L, Q, R, M and I live on different floors in the same building having seven floors numbered one to seven. (The first floor is numbered one, the floor above it is numbered two and so on and the topmost floor is numbered as seven.)
Three persons live between I and M. M lives on the floor immediately above S, who does not live on an odd-numbered floor. P is neither live on odd number nor topmost floor. I does not live on the first floor.
Two persons live between R and S. Q lives neither on the first floor nor on the fourth floor.

23. Who lives on the floor just above M?
(a) L (b) P (c) Q
(d) R (e) None of these

24. How many persons live between L and P?
(a) None (b) One (c)Two
(d) Three (e) Can't be determined

25. Which of the following pairs live on the first floor and the topmost floor respectively?
(a) L, Q (b) Q, P (c) I, Q
(d) L, I (e) Can't be determined

26. Who among the following lives on the topmost floor?
(a) I (b) Q (c) P
(d) L (e) None of these

27. Which of the following combinations is true?
(a) First floor-S (b) Fourth floor-R
(c) Third floor-M (d) Sixth floor-I
(e) None of these

28. How many pairs of letters are there in the word (in forward direction) APPLICATION, each of which have as many letters between then in the word as they have between then in the English alphabet?
(a) One (b) Two (c) Three
(d) Four (e) None of these.

29. In a certain coding system, PAPER is written as PERPA and SUBJECT is written as JECTSUB, what should be the code for COUNCIL?
(a) NCILCOU (b) LICNOUC (c)NCOUCIL
(d) NLICUOC (e) NILCCOU

30. In a certain code language 'lu ja ka hu' means 'will you meet us', 'lu ka hu pa means 'will you sold us'. Then What is the code of 'meet' in this code language?
(a) ja (b) lu (c) ka
(d) hu (e) cannot be determined

31. In a certain code language COMBINE is written as XLNYRMV. How will TOWARDS be written in that code language?
(a) FLDZIWJ (b) GLDZIWH (c) GLEZJWH
(d) FLEZIWH (e) None of these

32. 37 girls are standing in a row facing the school building Ayesha is fifteenth from the left end. If she is shifted six places to the right what is her position from the right end?
(a) 16th (b) 21st (c) 20th
(d) 18 th (e) None of these

33. X's mother is the mother-in-law of the father of Z. Z is the brother of Y while X is the father of M. How is X related to Z?
(a) Paternal uncle (b) Maternal uncle
(c) Cousin (d) Grandfather
(e) Brother-in-law

34. If A is a brother of B, C is the sister of A, D is the brother of E, E is the daughter of B, F is the father of C. than who is the uncle of D?
(a) A (b) C (c) B
(d) None of these (e) Can't be determined

35. A said to B that B's mother was the mother-in-law of A's mother. How is A's mother related to B's mother?
(a) Daughter-in-law (b) Mother-in-law
(c) Sister (d) Aunt
(e) Sister-in-law

QUANTITATIVE APTITUDE

Directions (36-40): What should come in the place of question mark (?) in the following questions?

36. $\frac{7}{5}$ *of* 58 + $\frac{3}{8}$ *of* 139.2 =?
(a) 133.4 (b) 137.2 (c) 127.8
(d) 131.6 (e) None of these

37. 12% *of* 555 + 15% *of* 666 =?
(a) 166.5 (b) 167.5 (c) 168.5
(d) 169.5 (e) None of these

38. 84368 + 65466 − 72009 − 13964 =?
(a) 61481 (b) 62921 (c) 63861
(d) 64241 (e) None of these

39. $33^{7.8} \times 33^{1.2} \div 33^{5} = 33 \times 33^{?}$
(a) 2.8 (b) 3 (c) 3.2
(d) 4 (e) 6

40. $\frac{?}{529} = \frac{324}{?}$
(a) 404 (b) 408 (c) 410
(d) 414 (e) 416

Directions (41-45): Study the following table carefully and answer the given questions:
The number of various crimes, as supplied by national crime record, reported in different states in the year 2012-13.

Dist.	Stalking	Assault	Theft	Murder	Criminal Trespass
Bihar	352	496	265	132	332
MP	376	225	216	125	115
UP	85	125	53	56	57
HP	10545	3652	12224	354	10128
AP	445	225	252	173	154
Delhi	473	576	675	764	852
Haryana	245	256	257	261	263
Rajasthan	273	276	278	252	353

41. The total number of various crimes in HP is
(a) 37803 (b) 38903 (c) 37903
(d) 36903 (e) 37003

42. Find the ratio of Stalking and Assault in UP to Theft and Criminal Trespass in Haryana.
(a) 28 : 51 (b) 21 : 52 (c) 52 : 21
(d) 14 : 55 (e) 55 : 14

43. Find the approximate average of Murder and Theft in all the eight states together.
(a) 1141 (b) 1132 (c) 1311
(d) 941 (e) 1021

44. The total number of Assaults and Murders together in Bihar is what per cent of the total number of crimes in that state?
(a) 29.82% (b) 39.82% (c) 25%
(d) 21.82% (e) 25.5%

45. Find the difference between the number of various crimes committed in Bihar and that in Rajasthan.
(a) 105 (b) 98 (c) 145
(d) 139 (e) 104

Directions (46-50): What should come in the place of question mark (?) in the following questions?

46. 4376 + 3209 – 1784 + 97 = 3125 + ?
(a) 2713 (b) 2743 (c) 2773
(d) 2793 (e) 2737

47. $\sqrt{?} + 14 = \sqrt{2601}$
(a) 1521 (b) 1369 (c) 1225
(d) 961 (e) 1296

48. 85% of 420 + ?% of 1080 = 735
(a) 25 (b) 30 (c) 35
(d) 40 (e) 45

49. $\frac{7}{3}$of$\frac{5}{4}$ of$\frac{1}{9}$ of 3024 = ?
(a) 920 (b) 940 (c) 960
(d) 980 (e) 840

50. 30% of 1225 – 64% of 555 = ?
(a) 10.7 (b) 12.3 (c) 13.4
(d) 17.5 (e) None of these

51. How many litres of water should be added to a 30 litre mixture of milk and water containing milk and water in the ratio of 7 : 3 such that the resultant mixture has 40% water in it?
(a)5 (b)2 (c)3
(d)8 (e) 7

52. The S.I on certain sum of money for 15 months at rate of 7.5% per annum exceed the S.I on same sum at 12.5% per annum for 8 months by Rs 3250 find sum?
(a)160000 (b)20000 (c)170000
(d) 18000 (e) 312000

53. 4 men and 3 women finish a job in 6 days, and 5 men and 7 women can do the same job in 4 days. How long will 1 man and 1 woman take to do the work?
(a) $22\left(\frac{2}{7}\right)$ days (b) $25\left(\frac{1}{2}\right)$ days (c)$5\left(\frac{1}{7}\right)$ days
(d) $12(\frac{7}{22})$ days (e) None of these

54. A and B started a business with initial investments in the ratio 5 : 7. If after one year their profits were in the ratio 1 : 2 and the period for A's investment was 7 months, B invested the money for
(a) 6 months (b) 2 ½ months (c) 10 months
(d) 4 months (e) 7 months

55. An army lost 10% its men in war, 10% of the remaining due to diseases and 10% of the rest were disabled. Thus, the strength was reduced to 729000 active men. Find the original strength.
(a) 1000000 (b) 1200000 (c) 1500000
(d) 1800000 (e) none of these

56. What is the difference between the compound interests on Rs. 5000 for 1 years at 4% per annum compounded yearly and half-yearly?
(a)2 (b)3 (c)4
(d)8 (e)none of these

57. The speeds of John and Max are 30 km/h and 40 km/h. Initially Max is at a place L and John is at a place M. The distance between L and M is 650 km. John started his journey 3 hours earlier than Max to meet each other. If they meet each other at a place P somewhere between L and M, then the distance between P and M is :
(a) 220 km (b) 250 km (c) 330 km
(d) 320 km (e) None of these

58. The average weight of boys in a class is 30 kg and the average weight of girls in the same class is 20 kg. If the average weight of the whole class is 23.25 kg, what could be the possible strength of boys and girls respectively in the same class?
(a) 14 and 26 (b) 13 and 27 (c) 17 and 27
(d) 19 and 21 (e) 14 and 27

59. A profit of 8% is made by selling a shirt after offering a discount of 12%. If the marked price of the shirt is Rs.1080, find its cost price
(a) 890 (b) 780 (c) 880
(d) 900 (e) none of these

60. The difference between $\frac{4}{5}$ of a number and 45% of the number is 56. What is 65% of the number?
(a) 96 (b) 104 (c) 112
(d) 120 (e) None of these

61. A man can row 24 km upstream and 54 km downstream in 6 hours. He can also row 36 km upstream and 48 km downstream in 8 hours. What is the speed of the man in still water?
(a) 18.75 kmph (b) 19.25 kmph
(c) 17.65 kmph (d) 15.55 kmph
(e)22.75 kmph

62. The numerator of a fraction is decreased by 25% and the denominator is increased by 250%. If the resultant fraction is $\frac{6}{5}$, what is the original fraction?
(a) $\frac{22}{5}$ (b) $\frac{24}{5}$ (c) $\frac{27}{6}$
(d) $\frac{28}{5}$ (e) $\frac{30}{11}$

63. What would be the area of a rectangle whose area is equal to the area of a circle of radius 7 cm?
(a) 77 cm^2 (b) 154 cm^2 (c) 184 cm^2
(d) 180 cm^2 (e) 150 cm^2

64. In a village three people contested for the post of village Pradhan. Due to their own interest, all the voters voted and no one vote was invalid. The losing candidate got 30% votes. What could be the minimum absolute margin of votes by which the winning candidate led by the nearest rival, if each candidate got an integral per cent of votes?
(a) 4 (b) 2 (c) 1
(d) 3 (e) None of these

65. The price of an article is first increased by 20% and later on the price were decreased by 25% due to reduction in sales. Find the net percentage change in final price of Article.
(a) 20% (b) 18% (c) 38%
(d) 10% (e) None of these

Directions (66–70): What will come in the place of the question mark (?) in the following number series?

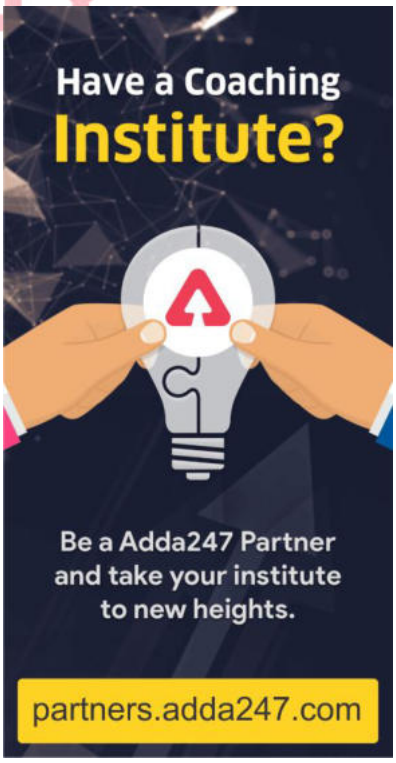
66. 48, 23, ?, 4.25, 1.125
(a) 10.5 (b) 10 (c) 2.5
(d) 11 (e) None of the above

67. 2, 15, 41, 80, 132, ?
(a) 197 (b) 150 (c) 178
(d) 180 (e) None of the above

68. ?, 15, 75, 525, 4725, 51975
(a) 5 (b) 10 (c) 8
(d) 6 (e) None of the above

69. 4, 19, 49, ?, 229
(a) 75 (b) 109 (c) 65
(d) 169 (e) None of the above

70. 840, ?, 420, 140, 35, 7
(a) 408 (b) 840 (c) 480
(d) 804 (e) None of the above



ENGLISH LANGUAGE

Directions (71-80): Read the passage carefully and answer the questions given below it. Certain words/ phrases have been given in bold to help you locate them while answering some of the questions.

One day all the employees reached the office and they saw a big advice on the door on which it was written: "Yesterday the person who has been hindering your growth in this company passed away. We invite you to join the **funeral** in the room that has been prepared in the gym". In the beginning, they all got sad for the death of one of their colleagues, but after a while they started getting curious to know who was that man who **hindered** the growth of his colleagues and the company itself.

The excitement in the gym was such that security agents were ordered to control the crowd within the room. The more people reached the coffin, the more the excitement heated up. Everyone thought: "Who is this guy who was hindering my progress? Well, at least he died!" One by one the **thrilled** employees got closer to the coffin, and when they looked inside it they suddenly became speechless. They stood nearby the coffin, shocked and in silence, as if someone had touched the deepest part of their soul. There was a mirror inside the coffin: everyone who looked inside it could see himself.

There was also a sign next to the mirror that said: "There is only one person who is capable to set limits to your growth: it is YOU." You are the only person who can **revolutionize** your life. You are the only person who can **influence** your happiness, your realization and your success. You are the only person who can help yourself. Your life does not change when your boss changes, when your friends change, when your partner changes, when your company changes. Your life changes when YOU change, when you go beyond your limiting beliefs, when you realize that you are the only one responsible for your life. "The most important relationship you can have is the one you have with yourself.''

71. Which of the following is true in context of the passage?
(a) The crowd gathered in the office for the funeral.
(b) The coffin was empty.
(c) The employee who died was hindering everybody' growth.
(d) Only a person is responsible for his own success.
(e) The crowd loved the employee who died.

72. What can we learn from this passage?
(a) Never trust anyone without confirming it yourself.
(b) One who is not hard working is not loved by the employees.
(c) Good relation with your employees is most important in your life.
(d) Your relationship with your friend is the most important one that can influence your happiness.
(e) The most important relationship you can have is the one you have with yourself.

73. What was inside the coffin?
(a) The corpse of the employee who died.
(b) The coffin was empty.
(c) A note on which there were instructions.
(d) There was a mirror inside the coffin.
(e) Photos of every employee.

74. What was the reason of employee's excitement?
(a) As they were expecting a bonus or promotion.
(b) Because the employee who hindered their growth died.
(c) As they were happy they will succeed now since no one will hinder their growth now.
(d) They were excited because what they found inside the box was completely opposite of what they expected.
(e) They were curious to know the identity of the man who hindered the growth of his colleagues.

75. Why everyone was speechless and shocked?
(a) They were shocked as the employee who died was the most hardworking one.
(b) As they never expected that their growth was actually hindered by one of their own.
(c) As they found a mirror inside the coffin.
(d) As one of the employees died.
(e) They were shocked to find that coffin was empty.

Directions (76-78): Choose the word/group of words which is MOST SIMILAR in meaning to the word / group of words printed in bold as used in the passage.

76. THRILLED
(a) Tedious (b) Monotonous (c)Delight
(d) Dull (e) Boring

77. INFLUENCE
(a) Insignificance (b) Domination
(c) Underwhelming (d) Triviality
(e) Weakness

78. REVOLUTIONIZE
(a) Harmony (b) Calm (c) Uprising
(d) Stagnation (e) Obedience

Directions (79-80): Choose the word/group of words which is MOST OPPOSITE in meaning of the word/ group of words printed in bold as used in the passage.

79. FUNERAL
(a) Nativity (b) Burial (c) Cremation
(d) Entombment (e) Inhumation

80. HINDERED
(a) Hamper (b) Inhibit (c) Impede
(d) Retard (e) Expedite

Directions (81-85): Rearrange the following six sentence (A), (B), (C), (D), (E) and (F) in the proper sequence to form a meaningful paragraph and then answer the questions given below.

A. The man who bought it immediately put it up for auction.
B. And he went on to list the many qualities of the animal. At the end of his sales talk a man said he would give 40 dinars for it.
C. "Look at this fine animal!" he shouted to passersby. "Have you ever seen a better specimen of a donkey? See how clean and strong it is!"
D. Nasruddin Hodja took his donkey to the market place and sold it for 30 dinars.
E. Another man offered 50. A third offered 55.
F. Hodja who was watching was amazed at the interest everyone was showing in the donkey.

81. Which of the following should be the **FIRST** sentence after rearrangement?
(a)F (b)E (c)B
(d) A (e)D

82. Which of the following should be the **SECOND** sentence after rearrangement?
(a)A (b)B (c)C
(d)E (e) D

83. Which of the following should be the **THIRD** sentence after rearrangement?
(a)E (b)F (c)D
(d)C (e)B

84. Which of the following should be the **FOURTH** sentence after rearrangement?
(a) B (b) G (c)F
(d) E (e) C

85. Which of the following should be the **LAST (SIXTH)** sentence after rearrangement?
(a)C (b)A (c)B
(d)D (e)F

Directions (86-90): Read each sentence to find out whether there is any grammatical or idiomatic error in it. The error, if any, will be in one part of the sentence. The number of that part is the answer. If there is 'No error', the answer is 5). (Ignore errors of punctuation, if any.)

86. Suppose, if you (a)/ were left alone to (b)/ live on a deserted island(c)/ what would you do? (d)/ No error (e).

87. He wondered that what (a)/would be the next move (b)/of his opponents who had (c)/ vowed to see him dislodged from power? (d)/No error (e).

88. The nation should (a)/ be grateful to (b) the armed forces for (c)/ protecting it. (d)/No error (e).

89. For so many years(a)/it is almost his habit (b)/ to go to the bed (c)/ at 10 pm daily. (d)/No error (e).

90. To the men (a)/ who worked so hard (b)/ in the project the news was(c)/ profound disappointing. (d)/No error (e).

Directions (91-95): In each sentence below four words have been printed in bold which are numbered (a), (b), (c) and (d) One of these words may be misspelt or inappropriate in the context of the sentence. Find out the wrongly spelt or inappropriate word. The number of that word is the answer. If all the words are correctly spelt and are appropriate the answer is (e) i.e. 'All correct.'

91. Rising (a)/**prices** (b)/of food grains will have an adverse **impac** (c)/on **developing** countries. (d)/ All correct (e)

92. To deal **effectively** (a)/with a **crisis** (b)/quick **decisions** (c)/are **requited**. (d)/All correct (e)

93. The IT Company has **succeeded** (a)/in achieving high growth rate **despite** (b)/**facing** (c)/**several** (d)/problems. All correct (e)

94. On an **average** (a)/there are very fern persons **willingly** (b)/to take **on** (c)/such **responsibility**. (d)/All correct (e)

95. More than **halve** (a)/the **budget** (b)/has been **spent** (c)/on **modernizing** (d)/the factory/All correct (e)

Directions (96-100): In the following passage, some of the words have been left out, each of which is indicated by a number. Find the suitable word from the options given against each number and fill up the blanks with appropriate words to make the paragraph meaningfully complete.

Jack went to work for a Farmer and **(96)** a penny. But while returning home, he dropped it in a brook. At home, his mother **(97)** him and told him to put his earnings in his pocket the next time.

The next day, he worked for a cow keeper, who **(98)** him a jar of milk. Jack tried to put the jar of milk in his pocket and spilled it everywhere. Once again, his mother rebuked him. She told him that he should have carried it on his shoulders. The next day, Jack was given a donkey. He carried the donkey on his shoulders. Now, the king had a daughter who never laughed. **(99)** Jack carrying the donkey on his shoulders, she **(100)** laughing for the first time.

96. (a) Collected (b)Earned (c)Had (d) Accumulated (e)Make

97. (a) Praised (b)complimented (c) Scolded (d) lambaste (e)Criticize

98. (a) Sold (b)Provide (c) Made (d) Gave (e)Issued

99. (a)Detecting (b) Seeing (c)Watching (d)Recognizing (e) Sawing

100. (a)Start (b)Stopped (c)commence (d)Initiated (e) Began

Solutions

REASONING ABILITY

Direction (1-5)

1. (a): M 7, Y 3, H 5

2. (b): 7 **Σ , 2 =, 9 ©**

3. (b): 4th to the Left - 17th from the left=13th from the left=E

4. (c): 2E….4**©G**

5. (d): 5th to the right – 13th from the right= 8th from the right=T

Direction (6-10)

6. (a); $D > C = E(True)$ $B \geq C = E(False)$

7. (b); S=Q≥P(False) S=Q>M≥N(True)

8. (d); $V = S(False)$ $Q > M(False)$

9. (a); $S \geq V = U > T(True)$ $V \geq Q(False)$

10. (a); E = J > L≥ W(True) M ≥ N > R > W≤ L(False)

Direction (11-15)

11. (b); Only 385 will be divisible by 3 when added 2 on first digit of each number.

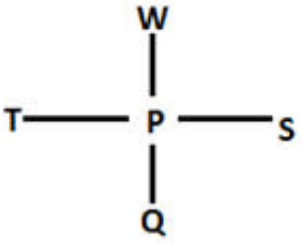
12. (c); 864 521 743 853 962

13. (a); 8÷4=2

14. (e); 786 614 539 487 398

15. (a); 864 152 347 845 926

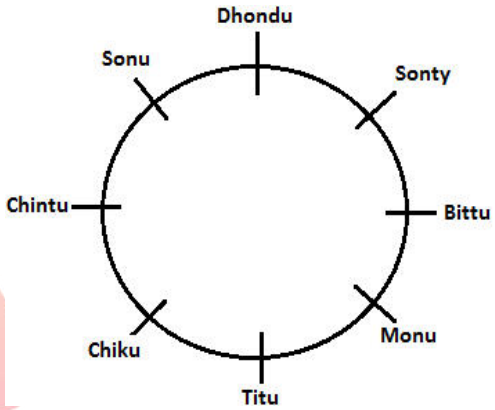
Direction (16-17)



16. (a);

17. (b);

Direction (18-22)



18. (b); **19. (a);** **20. (c);**

21. (d); **22. (c);**

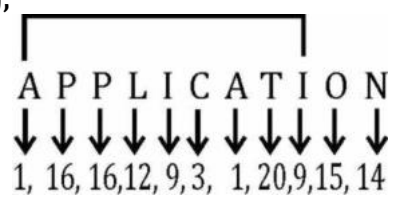
Directions (23-27)

Floor	Person
7	I
6	Q
5	R
4	P
3	M
2	S
1	L

23. (b); **24. (c);** **25. (d);**

26. (a); **27. (c);**

28. (a);



29. (a); **30. (a);**

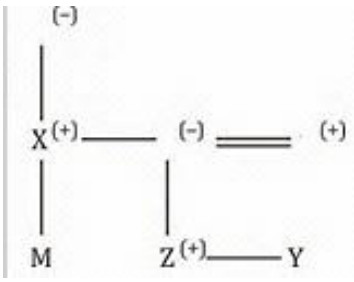
31. (b); Opposite Letter according to English alphabetical series.

C O M B I N E
↓ ↓ ↓ ↓ ↓ ↓ ↓
X L N Y R M V

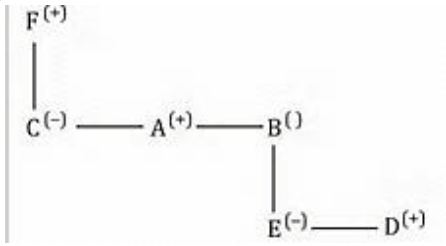
T O W A R D S
↓ ↓ ↓ ↓ ↓ ↓ ↓
G L D Z I W H

32. (e; L=15th sifted 6 place to right 15+6=21st R=(37-21)+1=17

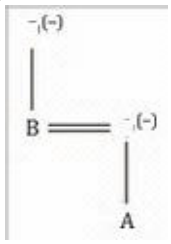
33. (b);



34. (a);



35. (a);



QUANTITATIVE APTITUDE

36. (a); $81.2 + 52.2 = 133.4$

37. (a); $66.6 + 99.9 = 166.5$

38. (c); $149834 - 85973 = 63861$

39. (b); $33^{?+1} = 33^{7.8+1.2-5}$
$\therefore ? = 9 - 5 - 1 = 3$

40. (d); $?^2 = 529 \times 324$
$\therefore ? = 23 \times 18 = 414$

41. (d); Total No. of crimes in HP = 36903

42. (b); Ratio = 210 : 520
= 21 : 52

43. (e); $= \frac{2117+14220}{16^{16}}$
$= \frac{16337}{16}$
≈ 1021

44. (b); Required $= \frac{628}{1577} \times 100$
= 39.82%

45. (c); Required difference = 1577 – 1432 = 145

46. (c); ?= 7682 – 4909 = 2773

47. (b); $\sqrt{?} = \sqrt{2601} - 14 = 51 - 14 = 37$
? = 1369

48. (c); $\frac{85}{100} \times 420 + \frac{x}{100} \times 1080 = 735$
$\Rightarrow$ x = 35

49. (d); 980

50. (b); ? = 367.5 – 355.2
= 12.3

51. (a); Let Required quantity $= x$
$\frac{21}{9+x} = \frac{3}{2}$
$42 = 27 + 3x$
$3x = 15$
$x = 5$

52. (e); Let sum $= x$
$x \times \frac{15}{12} \times 7.5 \times \frac{1}{100} - x \times 12.5 \times \frac{8}{12} \times \frac{1}{100}$
$= 3250$
$\frac{3}{32}x - \frac{x}{12} = 3250$
$\frac{9x-8x}{96} = 3250$
$x = 96 \times 3250$
$x = 312000$

53. (a); Let men's 1 day work $= x$
Let women's 1 day work $= y$
$4x + 3y = \frac{1}{6}$ .....(i)
$5x + 7y = \frac{1}{4}$ .....(ii)
$\therefore$ By solving eqn. (i) and (ii) —
$y = \frac{1}{78}$ $x = \frac{5}{156}$
$\therefore$Required days $= \frac{1}{\frac{1}{78}+\frac{5}{156}} = \frac{1}{\frac{2+5}{156}} = \frac{156}{7} = 22\frac{2}{7}$

54. (c); Let B invested money for x months.
$\therefore$ $5 \times 7 : 7 \times x = 1 : 2$
$\therefore 35 : 7x = 1 : 2$
$7x = 35 \times 2$
$x = 10$ months

55. (a); Let initial men = 100
Lost in war $= \frac{10}{100} \times 100 = 10$
Lost in diseases $= \frac{10}{100} \times 90 = 9$
Disables= $\frac{81}{100} \times 90 = 8.1$
$\therefore$ Remaining men = 72.9
When 72.9 remaining total men = 100
When 729000 remaining total men
= 1000000

56. (a); When compounded yearly,
Student = 200
When compounded half – yearly
r = 2%, n = 2
∴ interest = 202
∴ difference = 202 – 200 = 2

57. (d); speed of john = 30 km/hr
Speed of max = 40 km/hr
Let distance b/w p and m = x km
$\frac{650-x}{30} = \frac{x}{40} + 3$
7x = 2240
x = 320 km

58. (b); Let Boys $= x$
Girls $= y$
$\therefore 23.25 = \frac{(30x+20y)}{x+y}$
$23.25x + 23.25y = 30x + 20y$
$6.75x = 3.25y$
$\frac{x}{y} = \frac{13}{27}$

59. (c); Cost Price $= 1080 \times \frac{88}{100} \times \frac{100}{108} = 880$

60. (b); $\frac{4}{5} = 80\%$
(80 – 45) = 35% of the no. = 56
65% of the no. $= \frac{56}{35} \times 65 = 104$

61. (b) $\frac{24}{u} + \frac{54}{v} = 6$ ..... (1)
$\frac{36}{u} + \frac{48}{v} = 8$ ..... (2)
eqn (1) × 3 – eqn (2) × 2
$\frac{72}{u} + \frac{162}{v} = 18$
$\frac{72}{u} + \frac{96}{v} = 16$
$\frac{66}{v} = 2$
$v = 33$
Put in the eqn (1)
$\frac{24}{u} + \frac{54}{33} = 6$
$u = 5.5$
∴ Speed of the man in still water
$= \frac{33+5.5}{2} = \frac{38.5}{2}$
= 19.25 kmph

62. (d); $\frac{x-\frac{25x}{100}}{y+\frac{250y}{100}} = \frac{6}{5}$
$\frac{75x}{350y} = \frac{6}{5}$
75x = 420y
$\frac{x}{y} = \frac{420}{75}$
$\frac{x}{y} = \frac{28}{5}$

63. (b); Required area $= \frac{22}{7} \times 7 \times 7$
= 154 cm2

64. (b); Since winning candidate and his rival got 70% of total votes.
$\therefore 34 + 36 = 70$
Required minimum margin $= 36 - 34 = 2$

65. (d); Net Change = 20 – 25 – $\frac{25\times20}{100}$
= 0 – 5 – 5
= – 10%

66. (a); ÷ 2 – 1 = 23, ÷ 2 – 1 = 10.5, ÷ 2 – 1 = 4.25.....

67. (a); 2 + 13 = 15, 15 + 26 = 41, 41 + 39 = 80, 80 + 52 = 132
∴ 132 + 65 = 197

68. (a); 51975 ÷ 11 = 4725, 4725 ÷ 9 = 525,
525 ÷ 7 = 75, 75 ÷ 5 = 15,
15 ÷ 3 = 5

69. (b); 4 + 15 = 19, 19 + 30 = 49, 49 + 60 = 109,
109 + 120 = 229

70. (b); 840 ÷ 1 = 840, 840 ÷ 2 = 420, 420 ÷ 3 = 140,
140 ÷ 4 = 35, 35 ÷ 5 = 7

ENGLISH LANGUAGE

71. (d); Refer to the last paragraph, "you are the only person who can influence your happiness, your realization and your success."

72. (e); Refer to the last paragraph, "the most important relationship you can have is the one you have with yourself."

73. (d); Refer to second paragraph, "there was a mirror inside the coffin: everyone who looked inside it could see himself".

74. (e); they were excited about the identity.

75. (c); Refer to the second paragraph it is explained there that they were shocked to see the mirror.

76. (c); Thrill means cause (someone) to have a sudden feeling of excitement and pleasure hence delight is most similar in meaning.

77. (b); influence means the capacity to have an effect on the character, development, or behaviour of someone or something, or the effect itself hence domination is the word most similar in meaning.

78. (c); Revolutionize means a forcible overthrow of a government or social order, in favour of a new system hence uprising is the word most similar in meaning.

79. (a); Funeral means a ceremony or service held shortly after a person's death, usually including the person's burial or cremation hence nativity is the word most opposite in meaning.

80. (e); hindered means make it difficult for (someone) to do something or for (something) to happen hence expedite is the word most opposite in meaning.

FOR questions(81-85);The correct sequence is DACBEF

81. (e); D

82. (a); A

83. (d); C

84. (a); B

85. (e); F

86. (a); Remove 'suppose'.

87. (a); Remove 'that'.

88. (e); No error.

89. (c); Remove 'the'

90. (d); Use 'profoundly' in place of 'profound'.

91. (c); Change 'impac' into 'impact'

92. (d); Change 'requited' into 'required'

93. (e);

94. (b); Change 'willingly' into 'willing'

95. (a); Change 'halve' into 'half'

96. (b);

97. (c);

98. (d);

99. (b);

100.(e);

adda247

REASONING ABILITY

Directions (1-5): Study the following information and answer the questions given below:
There are three rows i.e. row 1, row 2 and row 3 Such that row 2 is in the north of row 3 and row 1 is in the north of row 2. There are 4 persons sitting in row 1 and 8 persons are sitting in the row 2 and 4 persons are sitting in the row 3.

Persons sitting in the row 3 faces north. Persons sitting in the row 1 faces south. First 4 persons sitting from west to east in row 2 faces north and last four person sitting from west to east in row 2 faces south.

Note: All the persons sitting in the row 1 and row 3 are facing the persons sitting in the row 2.

E faces the one who sits second to the right of P. No one sits on the left of E. Only one person sits between P and R. Only two person sits between R and the one who faces F. D sits immediate right of F. D does not sits at the end of the row. Q sits second to the right of the one who faces D. A face the one who sits on the immediate left of Q. G faces S but does not sits at the end of the row. P is not the immediate neighbour of G. Only one person sits between K and S. K faces the one who sits third to the right of N. J and M are immediate neighbours. J does not face D. Only two person sits between M and L. More than two persons sits between B and C, who does not face L. C does not face south.

1. How many persons sit between A and G?
(a) One (b) None (c) Three
(d) Two (e) None of these

2. Who among the following sits second to the right of C?
(a) F (b) D (c) G
(d) L (e) None of these

3. Four of the following five belongs to a group following a certain pattern find the one that does not belong to that group.
(a) ML (b) CB (c) RF
(d) ED (e) KS

4. Which among the following pairs sits at the ends of the rows?
(a) BS (b) EQ (c) KG
(d) RM (e) None of these

5. How many persons sit on the right of L?
(a) Three (b) One (c) No one
(d) Four (e) None of these

Directions (6-10): Study the following information carefully and answer the given questions.

A word and number arrangement machine when given an input of words and numbers rearranges them following a particular rule. The following is an illustration of input and rearrangement.

Input: 42 74 TBEF WRAK 95 NLDG 31 65 KEOR QCOF
Step I: 90 42 74 TBEF NLDG 31 65 KEOR QCOF AKRW
Step II: 79 90 42 NLDG 31 65 KEOR QCOF AKRW BEFT
Step III: 60 79 90 42 NLDG 31 KEOR AKRW BEFT CFOQ
Step IV: 47 60 79 90 31 KEOR AKRW BEFT CFOQ DGLN
Step V: 26 47 60 79 90 AKRW BEFT CFOQ DGLN EKOR
Step V is the last step of the rearrangement. As per the rules followed in the above steps, find out in each of the following questions the appropriate steps for the given input.

Input: IMRE 40 69 RBHI 86 PMCN 25 KDSM 57 VATW

6. How many steps would be needed to complete the arrangement?
(a) V (b) VII (c) VI
(d) IV (e) None of these

7. Which step number would be the following output?
45 52 64 91 IMRE 25 ATVW BHIR CMNP DKMS
(a) II (b) III (c) V
(d) IV (e) None of these

8. Which of the following would be Step III?
(a) 52 64 91 IMRE 40 25 KDSM ATVW CMNP BHIR
(b) 52 64 91 IMRE 40 25 KDSM ATVW BHIR CMNP
(c) 64 52 91 IMRE 40 25 KDSM ATVW BHIR CMNP
(d) 52 91 64 IMRE 40 25 KDSM ATVW BHIR CMNP
(e) None of these

9. Which of the following element would be the 4th to the left of the one which is 8th from the left in the step IV?
(a) 91 (b) IMRE (c) 64
(d) CMNP (e) None of these

10. In Step V, which of the following element would be on eighth position from the right end?
(a) ATVW (b) BHIR (c) 64
(d) 52 (e) None of these

11. In the word 'HOUSEWARMING' all consonants are written as their preceding letter and all vowels are written as their following letters. Now all letters are arranged in alphabetical order from left to right and all the repeated letters are eliminated. Then, how many such pairs of letters are there, each of which have as many letters between them in the word (in both forward and backward direction) as they have between them in the English alphabetical series?
(a) One (b) Two (c) Four
(d) Three (e) More than four

12. If we form the word by 1st, 3rd and 5th letter of 'FORMATION' and 3rd and 4th letter of 'WOMEN' then, what will be the 3rd letter from right?
(a) R (b) A (c) M
(d) E (e) None of these

Directions (13-15): Study the following information carefully and answer the questions given below.
A%B (28)- A is 42m in north of B
A$B (13)- A is 27m in south of B
A#B (24)- A is 28 in east of B
A&B (25)- A is 29m in west of B
M#L (10), N%M (11), O&N (13), P$O (31), Q#P (38), R%Q (6)

13. N is in which direction with respect to Q?
(a) North (b) West (c) North-west
(d) East (e) South-east

14. If Z is the midpoint of the line formed between M and R, then what is the distance between L and Z?
(a) 35.5m (b) 34m (c) 36.5m
(d) 37.5m (e) None of these

15. What is the distance between L and R?
(a) 50m (b) 51m (c) 46m
(d) 48m (e) 49m

Directions (16-20): In the following questions, the symbols %, &, #, * and @ are used with the following meaning as illustrated below-
'P#Q' means 'P is not greater than Q'
'P*Q' means 'P is neither equal to nor smaller than Q'
'P%Q' means 'P is not smaller than Q'
'P@Q' means 'P is neither smaller than nor greater than Q'
'P&Q' means 'P is neither greater than nor equal to Q'

Now in each of the following questions assuming the given statement to be true, find which of the conclusions given below them is/are definitely true and give your answer accordingly.
(a) If only conclusion I follows.
(b) If only conclusion II follows.
(c) If either conclusion I or II follows.
(d) If neither conclusion I nor II follows.
(e) If both conclusions I and II follow.

16. **Statements:** N * Q % R % O & P @ M
Conclusions: **I.** N % O **II.** O & M

17. **Statements:** A # B * C * D & E
Conclusions: **I.** A * D **II.** D & B

18. **Statements:** K % J * H % G; H * S % T
Conclusions: **I.** H & K **II.** T * J

19. **Statements:** B # D @ F # G * H % C
Conclusions: **I.** B & G **II.** G @ B

20. **Statements:** V % W & K # L; W * P @ M
Conclusions: **I.** M & L **II.** V * W

Direction (21-25): Study the following information carefully and answer the questions given below:

Six persons are sitting in a row. Some of them are facing North and Some are facing South. They are of different ages. Person whose age is even numbered doesn't sit immediate right of the person whose age is even numbered.

Two persons sit between P and T and one of them sits at extreme end. Three persons are sitting between the persons whose age is 14 and 42. Person whose age is 15 sits 2nd to the left of T. There are as many persons sit between T and person whose age is 15 as between the persons whose ages are 15 and 28. Q sits immediate right of the person whose age is 15. One person sits between S and U and neither of them sit at extreme end. Q is older than R. T whose age is even numbered is older than U who faces North. Person whose age is 20 sits 3rd to the left of the person whose age is 19.

21. How many persons are sitting between R and the person whose age is 20?
(a) One (b) Three (c) Two
(d) Four (e) None

22. Who among the following sits immediate right of U?
(a) S
(b) Person whose age is 19
(c) T
(d) Person whose age is 42
(e) None of these

23. What is the position of Q with respect to the 2nd youngest person?
(a) 2nd to the right (b) Immediate left
(c) Immediate right (d) 2nd to the left
(e) None of these

24. What is the age of the person who sits immediate left of S?
(a) 14 (b) 15 (c) 28
(d) 19 (e) None of these

25. How many persons are facing North?
(a) Two (b) Three (c) One
(d) None (e) More than three

Direction (26-30): Study the following information and answer the given questions:

In alphabetical series each consonant is assigned a different number from 1-6 (for ex- B is coded as 1, C-2…….H-6) and again those numbers get repeated (for ex- J-1, K-2…….so on). And for the codes of Vowels is starts from the numeric code of Z i.e. if the code of Z is 2 then the code of vowel A is 2 and code of E is 3 and so on till U which is coded as 6.
Note: The code of vowels lies in the range of 1 to 7.

Besides the above information, following operations are to be applied for coding the words given in the questions below.

If the two immediate digits are same (in the code) then the digit of the letter having higher place value in the English alphabet will be changed to '♠' i.e. If the code of a word is '225' hence the code will be changed to '♠25' and if the two immediate digits (in the code) are in the form such that the preceding digit is one more than its succeeding digit then the higher digit will be changed to '□' i.e. If the code of a word is '435' hence the code will be changed to '□35'.

26. If the code for the word '**SE_ _ED**' is coded as '3*T*□3♠□3' then what letters will come in the fill in the blanks to make it a meaningful word?
(a) RV (b) AL (c) EM
(d) AD (e) Either (b) or (d)

27. Which of the following word will be coded as '3462□3'?
I. SMOKED II. STAKED III. STOKED
(a) Only I (b) Only II (c) Either II or III
(d) Either I or III (e) All of the three

28. Which of the following combination of the words and codes is/are true?
(a) SLOWLY - ♠36♠□2
(b) BELIEVE- 1□3□4□4
(c) BURNT- 172□4
(d) ADVERB- 3♠□4□1
(e) All are true

29. If the code for the words 'BEAST MODE ____' is coded as '1□3♠4 ♠6♠2 4634' in the given coded pattern, then what will be the missing word?
(a) CLUB (b) WORK (c) STUN
(d) WORN (e) Either (b) and (d)

30. What is the code for 'NECKLACE'?
(a) 4□2♠1353 (b) ↖42♠♠□23 (c) □421♠353
(d) □42♠1335 (e) None of these

Direction (31): Study the following information carefully and answer the questions given below:

Eight persons are sitting in a row and all are facing North. Only two persons sit to the right of A. Two persons sit between A and B. Three persons sit between C and G. E and G are immediate neighbors of B. D sits immediate left of E. F sits 2nd to the right of H.

31. How many persons are sitting right of G?
(a) Two (b) Three (c) Four
(d) Five (e) None of these

32. Rooftop solar power growth has demonstrated an overall positive trend, But this will need to be scaled up massively to achieve the national target.
Assumption:
(I) With ongoing improvements to solar cell efficiency and battery technology, rooftops will only get more attractive in the future.
(II) Major **solar** projects that connect to the grid often face the challenge of land acquisition and transmission connectivity.
(III) A survey helps determine usable rooftops, separating them from green spaces, and analyses the quality of the solar resource.
(a) Only II follows
(b) Both II and III follows
(c) Both I and III follows
(d) Only I follows
(e) Both I and II follows

33. To provide proper education, we need to improve our education system. To improve education system, we need good teachers. To provide good teachers, we again need good education. **I**n India there are some good institutes too but most of the students opt for a job rather than trying the career in teaching field which requires post-graduation as minimum eligibility criteria because they do not get a good salary there.
Course of Action-
(I) The Salary of the teachers should be hiked to encourage them for opting teaching.
(II) The minimum eligibility criterion to be a teacher should be graduate rather than post-graduation and PhD to become a teacher as students can get a job even after graduation.
(a) Only II follows (b) Only I follows
(c) Either I or II follows (d) Neither I nor II follows
(e) Both I and II follows

Direction (34-38): Study the following information carefully and answer the questions given below:
Six persons are working in a company. Their designations are Chief Executive Officer (CEO), Chief Managing Director

(CMD), Managing Director (MD), General Manager (GM), Chief Finance Officer (CFO), Finance Officer (FO). Sequence of the posts are as above i.e. the post of Chief Executive Officer (CEO) is higher than Chief Managing Director (CMD), the post of Chief Managing Director (CMD) is higher than Managing Director (MD) and so on the post of Chief Finance Officer (CFO) is higher than Finance Officer (FO). They have different years of experiences. They get different annual salaries.

Only two person's designation is lower than the designation of the person whose annual salary is 7 lakhs. There are as many posts above the post of the person whose annual salary is 14 lakhs as below the post of the person who have 7-year experience. Annual salary of CEO is 6 lakhs. There are three posts in between the post of the persons whose experience are 4 years and 5 years. Person whose annual salary is 14 lakhs have just higher post than the post of the person who have 6 years' experience and just lower post than the post of the person who have 8 years' experience. Two posts are between the posts of the person who have 3 years and 8 years' experience. Person whose annual salary is 5 lakhs have higher post than the person whose annual salary is 9 lakhs and lower post than the person whose annual salary is 4 lakhs. Person whose salary is 9 lakhs doesn't have 4 years' experience.

34. Who among the following has lowest salary?
(a) Person who is CMD
(b) Person who have 6 years' experience
(c) Person who is GM
(d) Person who have lowest experience
(e) None of these

35. Person who is GM have how many years' experience?
(a) 3 years (b) 4 years (c) 5 years
(d) 8 years (e) None of these

36. How many persons are senior than the person whose annual salary is 14 lakhs?
(a) None (b) One (c) Two
(d) Three (e) More than three

37. Which of the following is the annual salary of the person who is CFO?
(a) 4 lakhs (b) 5 lakhs (c) 7 lakhs
(d) 9 lakhs (e) None of these

38. Which of the following pair of combination is/are true?
(a) CMD - 4 lakhs (b) GM – 7 years (c) MD – 6 lakhs
(d) CFO – 5 lakhs (e) None is true

Direction (39-40): There are some criteria which will be considered during appraisal of employee-Statement by manager of a company.

- Punctuality and sincerity are one of the key points which will surely reviewed.
- Hard work and dedication towards work will be applauded.
- Just to quantify an amount in the salary package of employee with no reason will not be entertained.

39. Which of the following can be inferred from the above statement?
I. Punching machine of office will be evaluated by HR.
II. There will be minimum 10% increment for deserving employee based on their performance.
III. Some of employees of company have done a tremendous job with complete determination and enthusiasm.
(a) Only I (b) Both II and III (c) Both I and III
(d) Only III (e) None of these

40. Which of the following undermines the statement given by Manager?
I. Increment of 15% has been done for all the employees whose 1 year is completed.
II. Performance chart has been prepared by leaders of different department based on their proficiency.
III. Relaxation time for late coming of 240 minutes in a year i.e. of 10 minutes twice in a month is given to all employees.
(a) Only II (b) Both II and III (c) Both I and III
(d) Only I (e) None of these

Directions (41-45): Study the following information and answer the questions given below:

There are nine boxes which are kept one above the other such that the box which is placed at the bottom most position is numbered 1 and so on till the box which is placed at the top position is numbered 9.
All the boxes contain different number of pens in it.

Note: The number of pens in a box is equal to the multiple of the place number of the box which is kept immediately above it i.e. The number of pens in the box which is kept at the bottom is equal to the multiple of is 2, 4, 6… and so on and the number of pens in the box which is placed at the top (9^{th} position) is 10, 20, 30 and so on.

Only two boxes are kept between the box having 42 pens and box A. Box I is kept at the odd number position but immediately below box F. There is only one box is kept between box E and box having 25 pens. Box D is kept immediately above the box containing 63 pens. Box E does not contain 63 pens. The number of pens in Box G is equal to the difference between the number of pens in box D and

box I. Box B is kept above the box having 8 pens. Box G contains 21 less pens than box A contains. Only three boxes are kept between box D and the box containing 12 pens. Only two boxes are kept between box H and the box having 12 pens. More than three boxes are kept between box C and box H. The box having pens which is a perfect square of 3 is kept immediately above box C. The number of pens in box D is equal to the sum of the number of pens in box H and the box which is placed at 2nd position.

41. Which among the following box contains 42 pens?
(a) Box D (b) Box H (c) Box B
(d) Box E (e) Box I

42. How many boxes are kept above box F?
(a) Three (b) Two (c) Four
(d) Five (e) None of these

43. Number of boxes between I and the box having 63 pens is same between the box B and the box?
(a) Box G (b) 42 pens (c) 81 pens
(d) Box C (e) Both (a) and (c)

44. Box F contains how many pens?
(a) 25 (b) 42 (c) 63
(d) 81 (e) None of these

45. Total number of pens in the boxes A, G and I is?
(a) 153 (b) 149 (c) 155
(d) 151 (e) None of these

46. Begusarai, a district in Bihar which has seen the phase of kidnapping, extortion, murder to "The Industrial city of Bihar". Nowadays there are 4 major industries in Begusarai. Growth rate of Begusarai is top amongst all districts of Bihar and 5th among all districts of India in year 2017.

Which of the following can be inferred from the above statement?

I. Opportunities of the employment has been increased in Begusarai.
II. There is no case of murder, kidnapping and extortion in 2017.
III. People of Begusarai are hardworking and keen to go forward.
IV. Top industrialists of India are desirous to have their industry in Begusarai.

(a) Only II (b) Only I and III (c) Only I
(d) Only III and IV (e) None of these

47. Statement: Start to think of travelling by train for a holiday. A train journey can give one a better view of places on the way which an air journey cannot give. You can walk around whenever you want, meet other travelers and locals, relax and watch the landscape go peacefully by. Train travel is both a beautiful and affordable way to see the country, and no trip is more scenic than the trip by trains.

Conclusions:

I. While going for a holiday, people want to enjoy the view of the places on the way.
II. People should not travel by air when they are going for a holiday.

Which of the following can be concluded from the given statement?

(a) Only I follows (b) Only II follows
(c) Both I and II follow (d) None follows
(e) Either I or II follows

Directions: (48-50): Study the following information carefully and answer the questions which follow–
'T @ U' means 'T is parent of U (either mother or father)'
'T # U' means 'T is sister of U'
'T $ U' means 'U is grandchild of T'
'T % U' means 'T is brother of U'
'T & U' means 'T is the son-in-law of U'
'T * U' means 'T is the wife of U'
'T © U' means 'U is the mother of T'

There are some members in a family having three generation. The relation between the different members of the family are defined as follows.
U@G#J
C&I
F%H*C
B@H
G*F%H©I
J©A$D
B$E

48. If D is the only child of F, then how is D related to U?
(a) Son (b) Grandson
(c) Daughter (d) Grand daughter
(e) Can't be determined

49. If A has only one son, then how is J related to F?
(a) Son (b) Brother-in-law
(c) Brother (d) Father (e) None of these

50. If D has no sibling and B has no granddaughter, then how is E related to C?
(a) Daughter (b) Wife (c) Nephew
(d) Son (e) Cannot be determined

QUANTITATIVE APTITUDE

Directions (51-56): Study the table given below and answer the following questions. Some data is missing in the table. Table shows data regarding Rs.20 notes received by 5 different banks during demonetization.

Banks	Total no. of notes received by bank	% of notes on which 100% return is given	Ratio of notes on which (50% return : 80% return) is given	Total value of Rs.20 notes received by bank (in Rs.)
PNB	15,000	-------	5 : 7	-------
SBI	-------	80%	-------	9,00,000
Axis Bank	10,000	-------	1 : 4	-------
BOI	-------	75%	3 : 5	-------
BOB	24,000	-------	-------	4,80,000

Note: 1. 'Return' is the amount (face value of note) of notes returned by bank to its customers.
2. Each bank has given minimum of 50% return on all notes received by it.

51. If difference of notes on which 50% return is given and on which 80% return is given of PNB is 1000, then find number of notes on which 100% return is given by PNB are what percent of total notes received by BOB?
(a) 12.5% (b) 37.5% (c) 50%
(d) 25% (e) 62.5%

52. If total number of notes on which BOI gave 100% return and 50% return are 13500, then find total amount received by BOI is how much more or less than total amount received by Axis bank?
(a) Rs.1,20,000 (b) Rs.1,00,000 (c) Rs.1,50,000
(d) Rs.1,60,000 (e) Rs.1,80,000

53. If ratio of notes on which (50% return : 80% return) is given by BOB is same as ratio of notes on which (50% return : 80% return) is given by Axis bank and number of notes on which BOB gave 100% return are 20% less than total notes received by PNB, then find ratio of notes on which BOB gave 80% return to that of on which it gave 100% return.
(a) 2 : 3 (b) 1 : 3 (c) 4 : 5
(d) 5 : 7 (e) None of the above.

54. If total number of notes received by BOI is 40% less than total number of notes received by SBI, then find average number of Rs.20 notes received by these 5 banks.
(a) 24,700 (b) 25,000 (c) 25,400
(d) 24,200 (e) Cannot be determined.

55. If percentage of notes on which 100% return is given by PNB is 50%, then find the amount earned by PNB in this whole transaction.
(a) Rs.47,750 (b) Rs.44,500 (c) Rs.41,500
(d) Rs.45,750 (e) Rs.48,750

56. If difference of number of notes on which PNB gave 50% return and 80% return is 1500 and number of notes on which Axis bank gave 80% return are 1750 less than number of notes on which PNB gave 50% return, then find total number of notes on which PNB and Axis Bank gave 100% return together.
(a) 12000 (b) 13000 (c) 12500
(d) 14000 (e) 13500

57. A spend 30% of his monthly salary on house rent, 40% of the remaining salary on clothing and he distributes his remaining monthly salary among his two daughters and a son in the ratio 5 : 5 : 4. If difference of A's monthly expenditure on Clothing and monthly amount given by A to his son is Rs.24000, then find A's annual expenditure on house rent.
(a) Rs.500000 (b) Rs.540000 (c) Rs.550000
(d) Rs.560000 (e) Rs.600000

58. A can complete a piece of work in 33 days and C is three times more efficient than A. Ratio of efficiency of B to that of C is 3 : 2. If all three starts working together, then find in how many days the work will be completed?
(a) $2\frac{1}{2}$ days (b) 5 days (c) 3 days
(d) 4 days (e) $4\frac{1}{2}$ days

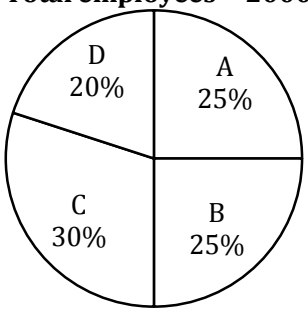
59. A, B & C entered into a partnership business. Amount invested by B is 3 times of amount invested by A and ratio of amount invested by C to that of B is 1 : 2. After 11 months, all 3 withdrew Rs.Y. If ratio of C's profit share to total profit at the end of the year is 35 : 129, then find profit sharing ratio of A to that of B at the end of the year.
(a) 19 : 75 (b) 41 : 53 (c) 67 : 27
(d) 23 : 71 (e) 31 : 63

60. A vessel contains milk and water in the ratio 3 : 1. When 80l mixture is taken out and completely replaced by milk, then milk becomes 700% of the water in the vessel. Find original quantity of the vessel.
(a) 240 lit (b) 280 lit (c) 320 lit
(d) 200 lit (e) 160 lit

Directions (61-65): Study the pie chart and table given below and answer the following questions.

Pie chart shows the percentage distribution of total employees of a company – X in 4 different departments (A, B, C & D) and table shows the number of male employees in these departments.

Total employees = 2000



Departments	Male employees
A	240
B	225
C	350
D	160

61. If 38% of the female employees in C are newly recruited and ratio of male employees to female employees who are newly recruited in C is 3 : 5, then find total number of old employees in C is what percent of total employees in C?
(a) $83\frac{1}{3}\%$ (b) $74\frac{2}{3}\%$ (c) $65\frac{2}{3}\%$
(d) $70\frac{2}{3}\%$ (e) $78\frac{1}{3}\%$

62. If ratio of male employees to female employees in company – Y is 4 : 3 and male employees in company – Y are 300% more than male employees in C of company – X, then find total employees in company – Y are how much more or less than that of in company – X?
(a) 450 (b) 800 (c) 560
(d) 630 (e) 750

63. If 16% female employees of B left B and joined D, then find the percentage change in no. of female employees in D after female employees of B joined D.
(a) $25\frac{2}{3}\%$ (b) $34\frac{2}{3}\%$ (c) $18\frac{1}{3}\%$
(d) $30\frac{2}{3}\%$ (e) $35\frac{1}{3}\%$

64. If male employees in company – K are 425 more than female employees in B in company – X, then find average number of female employees in A, C & D in company - X are how much less than male employees in company – K?
(a) 400 (b) 450 (c) 360
(d) 480 (e) 520

65. If ratio of employees who are in (18-40) age group to employees who are in (40+) age group in A, B, C & D in company – X is 13 : 12, 13 : 37, 4 : 1 & 33 : 7 respectively, then find ratio of total no. of employees of (18 – 40) age group to total no. of employees of (40+) age group employees in company – X.
(a) 2 : 1 (b) 9 : 5 (c) 5 : 4
(d) 3 : 2 (e) None of the above.

Directions (**66-72**): Find the wrong number in the following number series.

66. 8, 10, 20, 70, 320, 1570, 7830
(a) 7830 (b) 10 (c) 8
(d) 320 (e) 1570

67. 18, 20 , 43, 133, 537, 2691, 16163
(a) 43 (b) 16163 (c) 133
(d) 537 (e) 2691

68. 124, 140, 108, 156, 92, 172, 78
(a) 108 (b) 124 (c) 78
(d) 92 (e) 140

69. 260, 380, 510, 618, 759, 856, 1008
(a) 759 (b) 1008 (c) 260
(d) 510 (e) 618

70. 267, 343, 610, 953, 1563, 2515, 4079
(a) 4079 (b) 953 (c) 343
(d) 267 (e) 2515

71. 36, 80, 166, 340, 690, 1392, 2798
(a) 690 (b) 36 (c) 340
(d) 1392 (e) 80

72. 30, 100, 230, 490, 1010, 2050, 4130
(a) 30 (b) 4130 (c) 1010
(d) 490 (e) 2050

73. Ratio of present age of A to that of B is 2 : 5, ratio of present age of B to that of C is 25 : 18 and ratio of present age of C to that of D is 12 : 13. If D is 11 years younger than B, then find present age of A.
(a) 24 years (b) 20 years (c) 28 years
(d) 30 years (e) 18 years

74. Perimeter of a right angled triangle is 60m and length of hypotenuse of right angled triangle is 25m. If base of the right angled triangle is the smallest side, then find length of smallest side.
(a) 10m (b) 18m (c) 21m
(d) 25m (e) 15m

75. Shopkeeper sells two articles – M & N. He marks article – M 20% above its cost price and he gave 5% discount on it. Cost price of article – N is 20% more than cost price of article – M. If shopkeeper sold article – M at Rs.285 and article – N at 15% profit, then find selling price of article – N.

(a) Rs.345 (b) Rs.230 (c) Rs.460
(d) Rs.414 (e) Rs.322

Directions (76-80): The following questions are accompanied by two statements **(I)** and **(II).** You have to determine which statements(s) is/are sufficient/necessary to answer the questions.

(a) Statement **(I)** alone is sufficient to answer the question but statement **(II)** alone is not sufficient to answer the question.
(b) Statement **(II)** alone is sufficient to answer the question but statement **(I)** alone is not sufficient to answer the question.
(c) Both the statements taken together are necessary to answer the question, but neither of the statements alone is sufficient to answer the question.
(d) Either statement **(I)** or statement **(II)** by itself is sufficient to answer the question.
(e) Statements **(I)** and **(II)** taken together are not sufficient to answer the question.

76. Let t be total number of balls in a bag. Balls are of 3 colors - black, white and red. Find t.

(I) when one ball is drawn then Probability of getting a black ball is $\frac{1}{6}$, a red ball is $\frac{1}{6}$ & a white ball is $\frac{2}{3}$.
(II) If one white ball is lost and a ball is drawn, then probability of not getting a white ball is $\frac{8}{23}$.

77. Shivam and Deepak invested in a partnership business in the ratio of 4 : 5. Find the profit share of Shivam.

(I) Shivam invested Rs.12000 and period of investment of Shivam and Deepak is 10 months and 4 months respectively.
(II) Ratio of period of investment of Shivam and Deepak is 5 : 2 and Deepak's profit share is Rs.12000 less than Shivam's profit share.

78. Calculate the marked price of item?

(I) Shopkeeper marked the article 80% above its cost price and shopkeeper earned Rs.100 profit on the article.
(II) Ratio of marked price and discount allowed on the article is 3 : 1.

79. Calculate the rate of interest.

(I) Pankaj earned Rs.4500 as interest, when he invested Rs.6000.
(II) Pankaj invested equal amount at SI and at CI. After 2 years, CI received by Pankaj is Rs.90 more than the SI received by Pankaj.

80. Find the volume of cylinder.

(I) Curved surface area of cylinder is 1760 cm^2 and total surface area of cylinder is 70% more than its curved surface area.
(II) Volume of cylinder is twice of that of cone. Radius of cylinder and cone is equal and ratio of height of cylinder to that of cone is 2 : 3. Height of cone is 30 cm.

Directions (81-85): In the following questions, two quantities **(I)** and **(II)** are given. You have to solve both the quantities and mark the appropriate answer.

81. **Quantity I:** In how many ways a committee of 4 members with at least 2 women can be formed from 8 men and 4 women?
Quantity II: How many 3-digit numbers which are divisible by 3 can be formed from 0,1,2,3,4,5,6,7,8,9, such that 3-digit number always ends with an even number?

(a) Quantity I < Quantity II
(b) Quantity I ≤ Quantity II
(c) Quantity I > Quantity II
(d) Quantity I ≥ Quantity II
(e) Quantity I = Quantity II or no relation.

82. **Quantity I:** A man invested Rs.5900 for 3 years in a scheme offering R% p.a. at SI and received Rs.3186 as interest after 3 years. If the man invested Rs.7900 at (R+5)% p.a. at SI for 3 years, then find interest received by man (in Rs.).
Quantity II: A man invested Rs.X at 13% p.a. at CI for 2 years and interest received by him after 2 years is Rs.2325.96. Find X (in Rs.).

(a) Quantity I < Quantity II
(b) Quantity I ≤ Quantity II
(c) Quantity I > Quantity II
(d) Quantity I ≥ Quantity II
(e) Quantity I = Quantity II or no relation.

83. **Quantity I:** Ratio of CP to MP of an article is 19 : 30. Shopkeeper allowed 24% discount and earned 20% profit on selling the article. If SP of the article is Rs.912, then find difference between amount of profit earned and amount of discount allowed (in Rs.).
Quantity II: Shopkeeper marked an article 70% above its cost price and he allowed 40% discount on it. If shopkeeper sold the article at Rs.183.6, then find sum of amount of profit earned and amount of discount allowed(in Rs.).

(a) Quantity I < Quantity II
(b) Quantity I ≤ Quantity II
(c) Quantity I > Quantity II
(d) Quantity I ≥ Quantity II
(e) Quantity I = Quantity II or no relation.

84. **Quantity I:** A boat can cover distance of 480 km each in downstream and in upstream in total 11 hours. If ratio of speed of boat in still water to that of stream is 11 : 1, then find speed of boat in still water (in km/hr.).

Quantity II: A boat can cover a distance of 350 km in downstream in 3.5 hours and can cover a distance of 380 km in upstream in 5 hours. Find speed of boat in still water (in km/hr.).

(a) Quantity I < Quantity II
(b) Quantity I ≤ Quantity II
(c) Quantity I > Quantity II
(d) Quantity I ≥ Quantity II
(e) Quantity I = Quantity II or no relation.

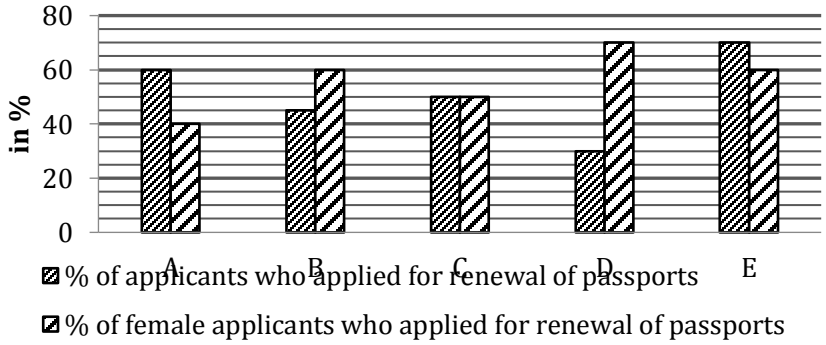
85. **Quantity I:** B's present age is 60% more than A's present age and ratio of present age of B to that of C is 5 : 2. D is 8 years younger than B and D's present age is twice of that of C. Find average of present age of A, B, C & D (in years).

Quantity II: Present age of R is equal to average of present age of P & Q. 4 years hence, age of P is twice of age of Q at that time. If R is 15 years younger than P, then find age of younger person among P, Q & R.

(a) Quantity I < Quantity II
(b) Quantity I ≤ Quantity II
(c) Quantity I > Quantity II
(d) Quantity I ≥ Quantity II
(e) Quantity I = Quantity II or no relation.

Directions (86-91): Study the bar chart given below and answer the following questions.

Bar chart shows the percentage of applicants who applied for renewal of passports on 5 different passport centers (A, B, C, D & E) and percentage of female applicants who applied for renewal of passports out of total applicants who applied for renewal of passports.



Note: Total number of applicants on a particular center = Number of applicants for new passport on that center + Number of applicants for renewal of passport on that center.

86. If total number of applicants in E are 70% of total number of applicants in A and ratio of male to female applicants who applied for new passports in A & E is 7 : 3 & 2 : 1 respectively, then find ratio of total female applicants in A to total female applicants in E.
(a) 85 : 91 (b) 90 : 91 (c) 90 : 93
(d) 88 : 91 (e) None of the above.

87. If difference between male and female who applied for new passports from C is 800 and ratio of male to female who applied for new passports from C is 2 : 3, then find total female who applied for passports from C is what percent of total male who applied for passports from C?
(a) $120\frac{2}{9}\%$ (b) $122\frac{2}{9}\%$ (c) $125\frac{2}{9}\%$
(d) $116\frac{2}{9}\%$ (e) $130\frac{2}{9}\%$

88. If difference between male and female who applied for renewal of passports from A is 2400, then find number of applicants who applied for new passport from A.
(a) 9000 (b) 6000 (c) 7000
(d) 10000 (e) 8000

89. If total applicants from B are 5000 less than total applicants from E and male applicants who applied for renewal of passports from B is 3600, then find total number of applicants who applied for new passports from B & E together
(a) 18500 (b) 21500 (c) 15500
(d) 19500 (e) 24500

90. If total applicants from C & E together are 30000 and female applicants who applied for renewal of passports from C are 800 more than that of from E, then find average number of applicants who applied for new passports from C & E.
(a) 9000 (b) 8000 (c) 6500
(d) 4000 (e) 11500

91. If ratio of applicants who applied for new passports from A to that of C is 2 : 3, then find total candidates who applied from C is what percent more than total candidates who applied from A?
(a) 80% (b) 50% (c) 90%
(d) 40% (e) 20%

92. When 2 cards are drawn randomly from a pack of cards, then find the probability of getting at most 1 ace card.
(a) $\frac{209}{221}$ (b) $\frac{10}{13}$ (c) $\frac{215}{221}$
(d) $\frac{16}{17}$ (e) $\frac{220}{221}$

93. Ayush invested Rs.75000 in a scheme offering R% p.a. SI for 5 years and Rs.50000 in another scheme offering 12%p.a. CI compounding annually for 2 years. If difference in 2nd year CI and 2nd year SI is Rs.2220, then find value of R%.
(a) 4% (b) 8% (c) 6%
(d) 12% (e) 14%

94. Train – Y crosses Train – X while running in same direction in 120 seconds and Train – Y crosses Train – X in $\frac{40}{3}$ seconds while running in opposite direction. If Train – X is running at 120 km/hr, then find speed of Train – Y (in km/hr).
(a) 150 (b) 180 (c) 200
(d) 160 (e) None of the above.

95. A two digit number increased by 27 when its digits are reversed and square of digit at units place is 33 more than the square of the digit at tens place of the original number respectively. Find the original number.
(a) 69 (b) 58 (c) 25
(d) 14 (e) None of the above.

Directions (96-100): Study the passage given below and answer the following questions.
There are 3 cities – Delhi, Dhaka and Bangkok. Total distance between Delhi – Dhaka, Dhaka – Bangkok and Delhi – Bangkok is 19800 km. Distance between Dhaka – Bangkok is 80% of the distance between Delhi – Bangkok and ratio of distance between Delhi – Dhaka to distance between Bangkok – Dhaka is 27 : 32.

Fares of 3 different flight operators (A, B & C) on these 3 routes (Delhi – Dhaka, Dhaka – Bangkok and Delhi – Bangkok) are –

Delhi – Dhaka: Fare of C is 25% more than that of B and fare of A is Rs.2700 less than that of B. Ratio of fare of A to that of C is 3 : 5.

Delhi – Bangkok: Average fare of A & B is Rs.20000 and fare of C is Rs.8000 more than average fare of A & B. Average fare of B & C is Rs.26000.

Dhaka – Bangkok: Fare of B is Rs.16000 and ratio of fare of A to that of B to that of C is 6 : 5 : 8.

96. If Veer wants to travel from Delhi – Dhaka and then Dhaka – Bangkok without changing flight operator, then which flight operator would be the cheapest option among A, B & C for Veer.
(a) A (b) B (c) C
(d) Either A or B (e) Either A or C

97. If Deepak is travelling from Dhaka – Bangkok and Bangkok – Delhi from C, then find the amount paid by Deepak per km for the entire trip.
(a) Rs. 3.11/km (b) Rs. 3.98/km (c) Rs. 3.42/km
(d) Rs. 3.62/km (e) Rs. 3.01/km

98. For which of the following trip, the fare will be maximum?
(a) A, Delhi – Bangkok
(b) C, Delhi – Dhaka
(c) B, Dhaka - Bangkok
(d) A, Dhaka – Bangkok
(e) B, Delhi - Dhaka

99. On Dhaka – Bangkok route, which flight operator is charging lowest fare per km?
(a) A (b) B (c) C
(d) Either B or C (e) Cannot be determined.

100. Find average fare of A, B & C on Delhi – Dhaka route.
(a) Rs.12000 (b) Rs.11500 (c) Rs.10400
(d) Rs.11200 (e) Rs.10800

ENGLISH LANGUAGE

Directions (101-105): Read the passage carefully and answer the questions based on the passage.

Enjoyed by humans since prehistoric times, music has been variously described as the food of love, a shorthand for emotion, and the universal language of humankind. For some, those seemingly rare individuals who do not express an enthusiasm for music are viewed with deep suspicion, like those who don't eat chocolate, who are unmoved by Shakespearean drama, or who fail to express delight over an Ashes victory. Yet recently the assumption that the

enjoyment of music is a near-universal human trait has been questioned, with evidence that some people simply don't derive pleasure from music, and that this does not reflect or result from a general lack of pleasure in life's activities. It is evident that these systems evolved to process stimuli of biological significance: the ability to discriminate tones in human speech provides information about the gender, size and emotional state of the speaker, and _____(1)_____ in some languages. Music is assumed to be a fortuitous by-product of this evolutionary development, and is more fully processed in the brain's right hemisphere, which is more associated with the representation of emotions than the left hemisphere.

It has been theorised that aesthetic responses to music may derive from the similarity of musical tones to tonal characteristics of human speech associated with different emotional states. If so, it would be hypothesised that the pleasure one finds in music would be related to skills in and enjoyment of social intercourse. Conversely, a lack of musical appreciation would predict deficiencies in social engagement: in Shakespeare's words, for the man that hath no music in himself, "the motions of his spirit are dull as night and his affections dark as Erebus: Let no such man be trusted". The inability to enjoy music has been investigated by a team of Spanish researchers, who started with the assumption that the condition may result from deficits in music perception – termed amusia – or a more general inability to derive pleasure from everyday activities – formally labelled anhedonia.

In Current Biology the research team reported on their investigation of the hypothesis that those who do not enjoy music may exhibit broader abnormalities of the systems of the brain involved in reward, motivation and arousal. They examined three groups of participants with high, average and low pleasure ratings in response to music. They undertook a monetary incentive delay task, which required them to respond quickly to targets in order to earn or avoid losing real money. The results confirmed that some otherwise healthy and happy people with normal music perception report that they do not enjoy music and show no autonomic responses to its presentation. This occurs in the presence of a normal behavioural and physiological response to monetary rewards, which demonstrates that a lack of enjoyment of music is not associated with general dysfunction in the brain's reward network. This demonstration of the existence of a domain-specific anhedonia – in this case, specific musical anhedonia – suggests that there are individual differences in access to the brain's reward system.

101. How has the author biologically connected music with emotions?
(a) general improper functioning of brain to lead to imbalance of emotions thus resulting in music anhedonia
(b) both of them are processes within the right hemisphere of the brain
(c) reduction in the activity of certain hemisphere of the brain affects emotions thus reducing joy arising from music
(d) both (a) and (b)
(e) all are correct

102. Which of the following statement is not correct in context of the study conducted in relation to music anhedonia?
(a) there were certain complete normal and healthful participants who didn't enjoy music
(b) they deduced that even within a usual brain functioning and response mechanism, it was possible not to enjoy music
(c) researchers had used monetary incentive within the study they conducted
(d) lack of ability to enjoy could be clearly related to malfunctioned responses towards rewards
(e) not feeling the pleasure of music might be related with larger malfunctioning within the brain

103. Which of the following statement can be inferred from the passage given above?
(i) Specific musical anhedonics show reduced functional connectivity between cortical regions associated with auditory processing.
(ii) While most people enjoy music and find it rewarding, there is substantial individual variability in the experience and degree of music-induced reward.
(iii) While music may be the universal language, it doesn't speak to everyone.
(a) only (iii)
(b) only (i) and (ii)
(c) only (ii) and (iii)
(d) all of the above
(e) none of these

104. What would be the presumption drawn in case there exists a connection between response to music and characteristics of human speech?
(a) lack of brain connectivity with fluency of speech might result to anhedonia
(b) music would fail to acquire reward value if a person isn't able to identify emotions through speech
(c) a person enjoying social dealings would find pleasure in music
(d) subjects could be insensible to music if they lack the ability to speak
(e) none of these

105. Which of the following phrases could fit in the blank (1), to make the statement grammatically correct and contextually meaningful?
(a) sensitivity based on their responses
(b) measuring their level of sensitivity
(c) origins of specific musical anhedonia
(d) differentiates meaning of utterances
(e) none of these

Directions (106-110): In each of the given questions, a pair of words has been given which is then followed by three statements. Find the statements where both the words grammatically and contextually fit in the given statements.

106. Equip: Arm
(a) A vassal needed economic resources to _____ the cavalry he was bound to contribute to his lord to fight his frequent wars.
(b) Readers may not even notice some of the more _____ elements like word balloons that get cut off by the panel borders.
(c) The stick was used to launch the missile with more force and accuracy than could be accomplished by simply hurling it with the _____ alone
(a) Only A (b) Only B (c) Both A & B
(d) Both B & C (e) All of the above

107. Ponder: Study
(a) Take a few minutes and _____ the question before you jump to a conclusion.
(b) Conjoint repression of civil and religious liberty had made thoughtful men _____ matters of church polity.
(c) The purpose of this _____ is to document the structure of a warm front in northeast Europe.
(a) Only A (b) Only B (c) Both B & C
(d) Both A & B (e) None of these

108. Anomaly: Departure
(a) Since my son has a history of failing classes, his good grades are a welcome _____.
(b) It was quite an/a _____ when the temperature reached 101 degrees in December in Michigan.
(c) The attention of the council was drawn to an/a _____ in the existing arrangements for patients suffering from pulmonary tuberculosis.
(a) Only A (b) Only B (c) Only C
(d) Both A & C (e) All (A), (B), (C)

109. Accolade: Recognition
(a) Facebook has lost a federal appeal in a lawsuit over facial _____ data, setting the company up to face a massive damages payment over its privacy practices.
(b) A majority of workers with university degrees say they won't enrol in new training unless they get _____ for prior training and experience.
(c) For their exceptional bravery the firefighters received _____ from both local and national officials
(a) All A, B & C (b) Both A & B (c) Both B & C
(d) Only C (e) None of these

110. Pinnacle: Height
(a) He's about the same _____ and weight but he's younger.
(b) Edward reached the _____ of the political world when he was elected prime minister of his country
(c) At last we could see Ambadji on a _____ ahead of us
(a) Both A & C (b) Both B & C (c) Both A & B
(d) All A, B, C (e) Only B

Directions (111-115): In each of the given questions, a word has been highlighted in the statement. In the options given below, a pair of words has been given. Find the pair of the word where the first word is the synonym of the highlighted word whereas the second word is the antonym of the given word.

111. Valour and sacrifice of the Armed Forces will be honoured at this year's India Day parade, the largest parade outside India to mark the country's independence that brings together thousands of members of the diaspora for one of the biggest cultural extravaganzas in the US.
(a) timidity: wimpiness (b) audacity: fortitude
(c) gallantry: cojone (d) bravery: cowardice
(e) none of these

112. Veteran attorneys interviewed by the Guardian said Epstein's death would not **impede** federal prosecutors from pursuing conspiracy cases against others.
(a) extol: substitute (b) facilitate: hinder
(c) withstand: surrender (d) abstruse: remission
(e) restrain: expedite

113. The U.S. **appreciates** Turkey and Russia's efforts to reach a cease-fire in Idlib's de-escalation zone and underlined that the attacks targeting civilians must stop
(a) asinine: recuperate (b) rectify: avenge
(c) acknowledge: disparage (d) tarnish: eschew
(e) exaggerate: entail

114. During the outing, Isha was seen donning a simple yet **elegant** white kurta and palazzo set with floral print and gold gotta patti work from the house of Sabyasachi.
(a) diminutive: prolific (b) graceful: gauche
(c) conceit: timid (d) handy: redundant
(e) none of these

115. Farmers **abhor** selling corn at harvest, Utterback acknowledges. "But getting rid of 2019 corn sooner than later would be prudent — don't hold onto it until next summer," he says.
(a) commend: derelish (b) applaud: acclaim
(c) abominate: execrate (d) loathe: admire
(e) disdain: despise

Directions (116-120): Given below are five statements, followed by a set of questions. Answer each of the question based on the given statements.
(a) Whatever one may (A)/ say of her, no one (B)/ dare call in question (C)/ her honesty of purpose. (D)/ No error (E)
(b) When Mrs. Paul heard his knock,(A)/ she went to the door and opened it, (B)/but she did not recognize him at first (C)/because she was not wearing her glasses.(D)/ No error (E)
(c) Following a succession of Nazi defeats and the suicide (A)/of Adolf Hitler, Germany signed the instrument of surrender on May 7, 1945, (B)/in Reims in eastern France. The document stipulated (C)/ that hostilities had to cease tomorrow. (D)/ No Error (E)
(d) Loui and Satpute will use a similar (A)/physiological test, in addition to (B)/issuing two kinds of surveys, to triple-check that their (C)/ participants truly have musical anhedonia. (D)/ No Error (E)
(e) We would have enjoyed the (A)/ journey more if the old lady in (B)/the adjacent compartment (C)/ would not have snorted all the time. (D)/ No Error (E)

116. Which of the following parts in statement (A) has error?
(a) C (b) B (c) D
(d) A (e) No Error

117. Which of the following parts in statement (B) has error?
(a) B (b) C (c) D
(d) A (e) No Error

118. Which of the following parts in statement (C) has error?
(a) C (b) A (c) B
(d) D (e) No Error

119. Which of the following parts in statement (D) has error?
(a) A (b) C (c) D
(d) B (e) No Error

120. Which of the following parts in statement (E) has error?
(a) B (b) D (c) A
(d) C (e) No Error

Directions (121-125): Read the following passage and answer the following questions. Some words are highlighted to help you answer some of the questions.

The last decade has seen many changes and considerable progress in the Indian car industry. The country became the fourth largest market for passenger cars. Domestic sales grew at 8 percent annually, reaching 3.4 million cars in 2018-19. Considering the country's potential and needs, this was not satisfactory. In the previous decade, growth was at 15 percent. Car penetration is only 28 per thousand, far lower than most Southeast Asian countries. The entry of global players into the Indian market and cars being of international standards led to exports increasing to 680,000 vehicles in 2018-19. Safety and emission standards during 2019-20 are similar to Europe, with all vehicles converting to Bharat VI by the end of March 2020. This has meant an increase in the cost of vehicles and _____.

The Indian consumer was used to seeing car models remaining unchanged for long periods. Intense competition in the market saw all manufacturers launching or upgrading existing models in fairly short intervals. The industry became more like that of a developed country. Competition also led to better technology benefiting the consumer. The average fuel efficiency of cars increased from about 16 km per litre to 19.2 km per litre. This resulted not only in reducing fuel consumption but also lowered CO2 emissions.

The sale of automatic transmission cars, which was negligible at the start of the decade, increased to 12 percent, largely because of the introduction of the lower cost manual automatic transmission, which gave the benefit of not increasing fuel consumption. Car sales extended beyond bigger cities to rural areas and small towns, a positive sign for the future of this industry. Maruti Suzuki sales in 'rural areas' increased from about 5 percent to 40 percent.

An important **driver** of sales growth was the increasing availability of finance for car purchases. The number of consumers who bought cars with borrowed funds increased from 66 to 80 percent. Non-banking financial institutions became important participants in enabling this growth. A major cause of the slowdown of sales in 2019-20 was the difficulty in the availability of finance due to problems in the financial sector. The decade saw the introduction and acceptance of shared platform operators like Uber and Ola. The emerging young car buyer often preferred not to buy a car so that he could enjoy many other experiences that were now available.

Diesel car sales had risen earlier in the decade, but are now in decline. Meeting Bharat VI norms has added considerably to cost. In addition, the Supreme Court ordered that diesel cars older than 10 years would not be allowed in the NCR. In other cases, where a percentage tax was prescribed, the rate was increased. As car prices increased, the amount of road tax went up. Slowing of growth is related to many customers not being able to afford the higher costs of acquisition.

121. What were the impetus for the decline of the sales growth in car industry at the end of the decade?
(a) Financial sector of the country was struggling.
(b) Launch of shared platform operators such as OLA and Uber.
(c) Increase in the cost due to the implementation of BHARAT VI.
(d) Restriction of Diesel cars older than 10 years in the NCR region
(e) All of these

122. According to the author, what were the reasons that can quote the similarities between the car industry of India and a developed nation?
(I) Commencement of shared platform operators like Uber and Ola.
(II) Existing models were ameliorated and introduced in short interludes.
(III) alleviation in fuel consumption led to the depletion of CO_2 particulate matter.
(a) Only (I) (b) Both (I) and (III)
(c) Only (II) (d) Both (II) and (III)
(e) None of these.

123. Which of the following phrase can be used to fill the blank (A)?
(a) acceleration in the sales growth
(b) leading to switching to alternatives
(c) partly explains the slowing of growth
(d) amplifying the CO_2 emissions
(e) None of these.

124. Which of the following statements is FALSE with reference to the passage?
(I) Bharat VI is an emission standard that brings changes in the Indian automobile industry in terms of pollutant emissions.
(II) Imports have increased due to the admittance of foreign companies in Indian economy
(III) Domestic sales in automobile industry declined at the end of the decade.
(a) Both (I) and (III) (b) only (II)
(c) Only (III) (d) Only (I)
(e) None of these.

125. According to the passage, choose the most suitable word that reflects the synonym of the highlighted word.
DRIVER
(a) straphanger (b) catalyst (c) prototype
(d) chauffer (e) None of these.

Directions (126-130): In each of the questions given below, a situation has been stated. Answer the question, based on the paragraph.

126. 'X' is a longtime employee true to the company and respected, maybe even revered, by the workforce. But he just does not seem to be supportive of the company's lean initiative. Even worse, 'X' is beginning to negatively influence some employees. 'X' is _____ about company's lean initiative?
(a) empathetic (b) scientific (c) passionate
(d) pessimistic (e) discreet

127. 'Y' was a manager at hotel. After his retirement he started his own food outlet in a small town and gained success. Later, due to some construction plans of government, 'Y' has to close down his business in the area. He again purchases the land in another area, starts his business and works for the success of his restaurant, day and night. 'Y' is a _____ person?
(a) hardworking (b) persevering (c) diligent
(d) enthusiastic (e) all of the above

128. Two goats came face to face while crossing a narrow bridge. "Let me pass", said one of them. "Never, you get out of my way", said the other goat. They quarrel each other and lost their balance. They fell into the stream down below and died! Both the goats were _____.
(a) intuitive (b) stubborn (c) persuasive
(d) epicurean (e) all of the above

129. Today, at the animal shelter where I volunteer, a little boy and his mom, who had adopted a kitten last week, came into our lobby carrying big bags full of food, toys, blankets, and other supplies we desperately need. The boy's mom said, 'Today is his birthday. Instead of birthday presents, he asked his dad and me to help donate to the shelter. The boy was _____.
(a) dramatic (b) creative (c) courageous
(d) generous (e) none of the above

130. Bob decided to try his skates, for he had received a pair of shiny new ones for Christmas. His dog, Spot, went with him. When Bob reached the pond, he did not stop to test the ice. He was having a delightful time when suddenly Spot began to bark, for his keen ears had caught the sound of cracking ice. Bob did not heed him, but kept on skating. Suddenly the ice gave way. Spot dashed to the place where his little master had disappeared and with some difficulty succeeded in pulling him out. Spot was a _____ dog.
(a) honest (b) faithful (c) leader
(d) cultured (e) notorious

Directions (131-135): Read the passage given below and answer the questions based on the information provided in the passage. Certain words have been highlighted to aid in answering the questions.

The shooting down of a passenger plane by Iran's military on Wednesday, a few hours after it launched missile attacks on U.S. troops in Iraq, is the most tragic outcome of the recent spike in U.S.-Iran tensions. The Ukrainian jet with 176 aboard was hit by an Iranian surface-to-air missile shortly after it took off from Tehran's Imam Khomeini Airport. After initially rejecting western assertion that an Iranian missile brought down the plane, Tehran on Saturday said one of its soldiers fired the missile, mistaking the jet for an enemy aircraft "as it turned to a sensitive area". This is not the first time U.S.-Iran tensions have led to an aviation disaster. In 1988, in the last stage of the Iran-Iraq war, a U.S. Navy warship shot down an Iran Air flight over the Gulf, killing all 290 passengers. Then the U.S. troops said they mistook the plane for a military aircraft that was going to attack the ship. Iran says the same today. In both incidents, innocents, who did not have anything to do with the conflict, became victims.

This time it was U.S. President Donald Trump's reckless decision to assassinate Soleimani that pushed both**___(A)___**. After launching missiles at U.S. troops in Iraq in retaliation for the General's killing, Iran's missile defence systems were on high alert, anticipating **retaliatory** American air strikes. Iran blames "human error" for the attack on the passenger plane. But whatever the context is, it cannot abdicate responsibility for what happened. Ukraine International Airlines says the flight took off after clearance from the airport. The airline also rejects the Iranian military's claim that the plane veered off its route. Iran's admission and apology is a step in the right direction. But it should carry out, along with international investigators, a thorough probe into what led to the "accident", and punish whoever is responsible for the "human error". Such mistakes are unacceptable even in war. Iran should have put in place the highest safety measures and followed international protocols while preparing itself for enemy retaliation. Clearly it did not do so. And innocent people paid a price for Iran's mistake. Both Iran and the U.S. should also ask themselves whether the confrontational path they have chosen since Mr. Trump unilaterally pulled the U.S. out of the Iran nuclear deal, in May 2018, was worth the risk. Both countries were on the brink of an all-out war early this week. At least 226 people, mostly Iranians, have already lost their lives in tragedies related to the Soleimani killing (over 50 were killed in a stampede at the funeral). If Iran is sincere in its apology, it should not only unearth what happened and punish the culprits but also take immediate steps to reduce tensions with the U.S.

31. What are the steps that Iran can take in order to bring justice to the victims of the Plane crash?
(a) Wage a full-fledged war against the Americans and eliminate the attackers of Soleimani.
(b) Prevent any plane from entering the airspace of Iran to disrupt the aviation network worldwide.
(c) Increase the oil prices to bleed countries financially and show the world the might of Iran.
(d) Enable a thorough investigation to unravel the sequence of events which led to the tragic crash in order to punish the guilty as well as de-escalate with America to prevent such future events.
(e) (d) and (c)

132. Which of the following phrase could fit in the blank (A), to make the statement grammatically correct and contextually meaningful?
(a) to rethink whether their capability to educate people was lacking.
(b) countries to have an all-time high cooperation in the fields of military and technology,
(c) countries to the brink of a war.
(d) to make friends with Iran to win the military games being organized this year.
(e) None of the above

133. What was the reason given by the Iranian government for the accidental shooting down of the civilian aircraft?
(a) The plane had an American flag painted on its wing causing the soldiers to think it was an enemy plane.
(b) The plane had strayed into a sensitive zone prompting the attack which resulted in the devastating accident
(c) The flight had taken off without clearance from the Tehran's Imam Khomeini Airport and was declared a threat to national security.
(d) There was an intelligence input regarding the presence of Americas top general being present in the plane and the attack was a way to kill him
(e) (b)& (d)

134. Which of the following word is similar to **retaliatory** as mentioned in the passage given above?
(a) redemption (b)vengeance (c)brisk
(d) hostility (e) None of the above

135. Which of the statements true in the options given below with respect to the passage?
(a) Iran took onus of the accident as soon as the news started to do rounds in the media.
(b) The aircraft was shot down without human intervention as Iran had activated emergency wartime protocols.
(c) President Trump withdrew from the Iran nuclear deal without consulting Iran.
(d) It is the for the first time that such a kind of aviation disaster has taken place in Iran.
(e) None of the above

Directions (136-140): Read the passage carefully and answer the questions based on the passage.

2010 was an exciting year for ecommerce. Among other innovations, smartphones and tablets started **_____(A)_____** and, in no time, these devices became the de facto choice for people to make online purchases, inspiring a flurry of technological developments. This set the tone for a decade in which online retail exploded. **(B)** This was the phase during which we **(1) estimated** BigBasket, in 2011, at a time the **(2) launched** worth of the **(3) ecommerce** market in India was (**4) pegged** at $6.3 billion. By 2017, it grew to $38.5 billion and, by 2026, it is projected to touch $200 billion. **(C)** *As we step into the new decade, here's my take on some definitive trends that will shape the Indian retail sector in the next few years, and pave the way for this growth.*

For a country with the second-highest base of internet users in the world, India surprisingly falls behind when it comes to the percentage of people who shop online. Today, **_____(D)_____** in India shop online while the remaining prefer to use the internet only for product research, communication, entertainment and other purposes. What this means is that retailers are sitting on a **(E)habitable** goldmine of potential customers and have the opportunity to tap into over $50 million worth of ecommerce transactions, driven by over 500 million first-timers to the internet and online shopping; a majority of these users are from 'Bharat', the India of small towns and rural areas. According to a Google-AT Kearney report, by the end of next year, there would be around 175 million online shoppers in India.

36. Which of the following words given in the options should come at the place marked as (A) in the above passage to make it grammatically correct and meaningful? Also, the word should fill in the two sentences given below to make them contextually correct and meaningful.

(I) As the tumour grows, cells towards its centre, being deprived of vital nutrients, cease _____ and become quiescent.

(II) This obsession with food choice often leads people to cut out the wrong ones, _____ the continuation of new diets.

(a) affiliating (b) proliferating (c) enriching
(d) alleviating (e) None of these

137. The sentence given in (B) has four words given in bold. Amongst the given bold words which of the followings must interchange to make the sentence grammatically and contextually correct and meaningful?

(a) 1-2 (b) 2-3 (c) 2-4
(d) 3-4 (e) None of these.

138. In the above passage, a sentence (C) is given in Italics. There may or may not be an error in one part of the sentence. Choose the part which has an error in it as your answer. If there is no error, then choose option (e) as your answer.

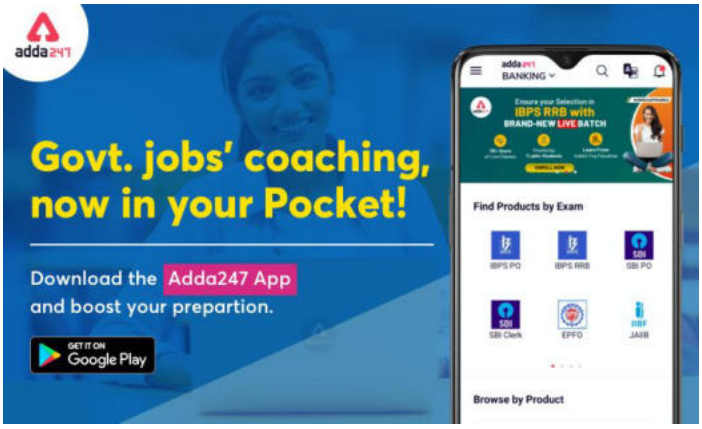
(a) As we step into the new decade,
(b) here's my take on some definitive trends that will shape
(c) shape the Indian retail sector in the next few years,
(d) and pave the way for this growth.
(e) No error

139. Choose the most suitable phrase for blank (D) to make the sentence grammatically and contextually correct.

(a) ecommerce market is being driven by electronics
(b) India's retail universe and the motto will be embracing
(c) Technology has already enabled consumers
(d) just 10 percent of the 500 million active internet users
(e) None of these

140. A word is given in bold in (E). Choose the word which should replace the word given in bold to make the sentence correct and meaningful. If no change is required, choose option (e) as your answer.

(a) virtual (b) ablaze (c) abrasive
(d) veritable (e) No change required

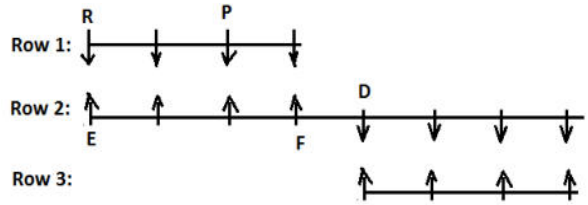


Solutions

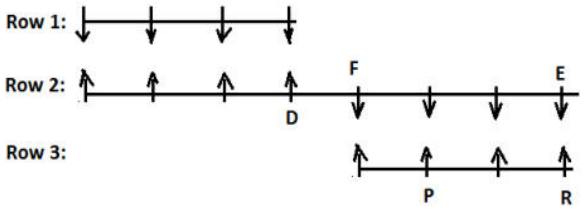
REASONING ABILITY

Directions (1-5): E faces the one who sits second to the right of P. No one sits on the left of E. Only one person sits between P and R. Only two person sits between R and the one who faces F. D sits immediate right of F. D does not sits at the end of the row.

Case 1

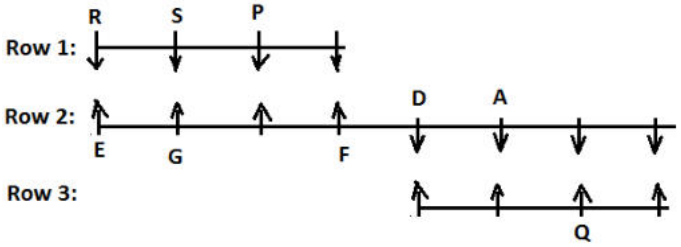


Case 2

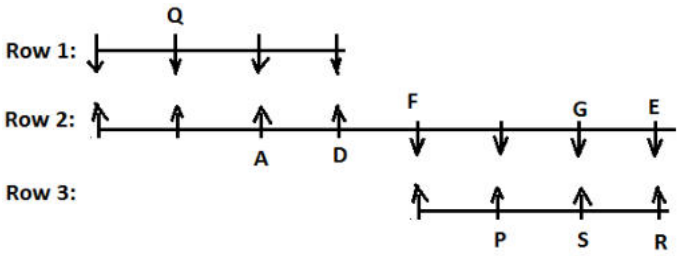


Q sits second to the right of the one who faces D. A face the one who sits on the immediate left of Q. G faces S but does not sits at the end of the row. P is not the immediate neighbour of G.

Case 1

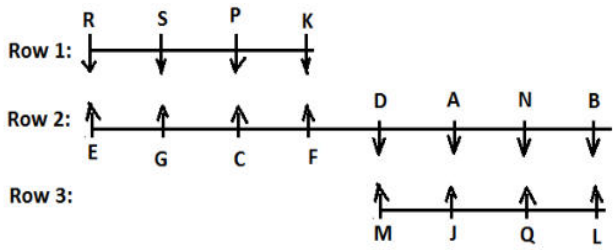


Case 2

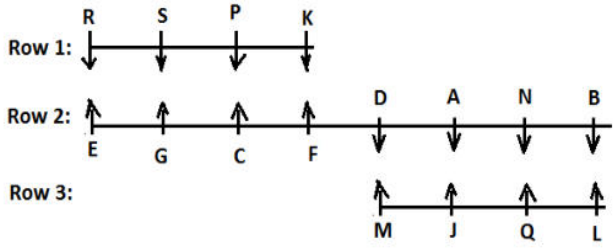


Only one person sits between K and S. K faces the one who sits third to the right of N. J and M are immediate neighbours. J does not faces D. Only two person sits between M and L. More than two persons sits between B and C, who does not faces L.

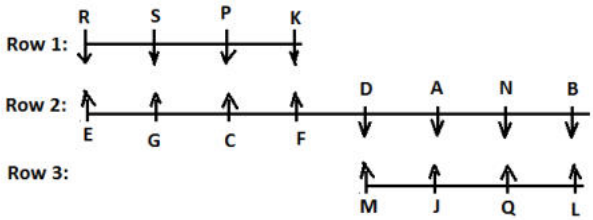
Case 1



Case 2



C does not face south. So case 2 gets eliminated.



1. **(c);** 2. **(b);** 3. **(c);**
4. **(d);** 5. **(c);**

Directions (6-10): Logic: As a first step let's first understand the logic behind the Output. Words are arranged from right end and numbers are arranged from left end. In each step one word and one number are arranged.

Word – Words are arranged in ascending order from left to right according to the English alphabetical order. In the first step the word starting with the letter having higher place value in the English alphabet is arranged first on the right end and also the letters of the word are arranged in increasing alphabetical order within the word.

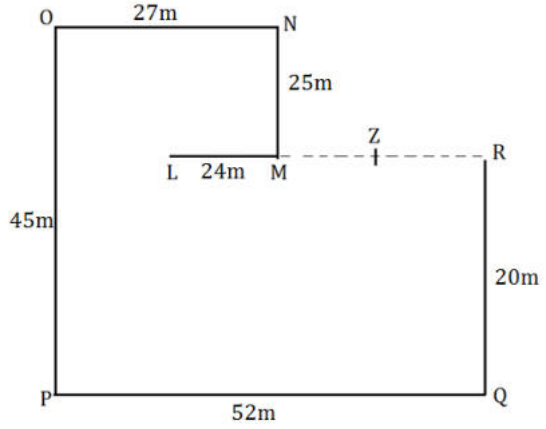
Number- Numbers are arranged in ascending order from left to right. In the firs step the highest number is arranged first and then in the second step 2nd highest numbered gets arranged and so on till the last step and also after rearranging the numbers add 5 in the even number and subtract 5 in the odd numbers.

Input: IMRE 40 69 RBHI 86 PMCN 25 KDSM 57 VATW
Step I: 91 IMRE 40 69 RBHI PMCN 25 KDSM 57 ATVW
Step II: 64 91 IMRE 40 PMCN 25 KDSM 57 ATVW BHIR
Step III: 52 64 91 IMRE 40 25 KDSM ATVW BHIR CMNP
Step IV: 45 52 64 91 IMRE 25 ATVW BHIR CMNP DKMS
Step V: 20 45 52 64 91 ATVW BHIR CMNP DKMS EIMR
Step V is the last step of the rearrangement.

6. (a); 7. (d); 8. (b);
9. (a); 10. (d);

11. (c); 12. (b);

Directions (13-15):



13. (c);

14. (c);

15. (e);

Directions (16-20):

16. (b); I. N % O (False) **II.** O & M (True)

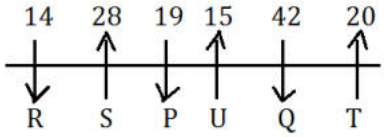
17. (b); I. A * D (False) **II.** D & B (True)

18. (a); I. H & K (True) **II.** T * J (False)

19. (c); I. B & G (False) **II.** G @ B (False)

20. (a); I. M & L (True) **II.** V * W (False)

Direction (21-25):



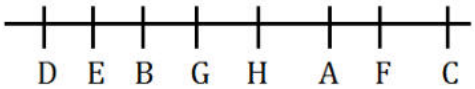
21. (d); 22. (d); 23. (c);
24. (a); 25. (b);

Direction (26-30): In this new pattern coding decoding each letter, except vowel, is assigned a number from 1-6 So, B-1, C-2, D-3, F-4, G-5, H-6, J-1, K-2, L-3, M-4, N-5, P-6, Q-1, R-2, S-3, T-4, V-5, W-6, X-1, Y-2, Z-3.

Also, each vowel is assigned different digits starting from the digit code of Z. So, for vowels the digit codes are - A-3, E-4, I-5, O-6, U-7.

26. (e); 27. (d); 28. (e);
29. (b); 30. (b);

31. (c);



32. (d); Only (I) can be assumed from the given statement as it is mentioned in the given statement that rooftop solar power technology is showing growth.

33. (e); Both I and II follows as salary is an important factor for encouraging students to opt teaching as a career option rather than job and changing the eligibility criterion to graduation for being a teacher as generally the students choose their career option after graduation.

Direction (34-38):

8 yrs	4 yrs	6 yrs	3 yrs	7 yrs	5 yrs
CEO	> CMD	> MD	> GM	> CFO	> FO
6 lakh	14 lakh	4 lakh	7 lakh	5 lakh	9 lakh

34. (b); 35. (a); 36. (b);
37. (b); 38. (d);

Direction (39-40):

39. (a); For I: Yes, it can be inferred from the given statements as it is clearly mentioned punctuality and sincerity are one of the key points which will surely reviewed.
For II: No, it is clear from the given statements that there will be increment but percentage cannot be inferred.
For III: No, as it is mentioned by manager that hard work and dedication towards work will be applauded. But, Is there some employee who have done their work with complete determination and enthusiasm, it cannot be inferred. We can assume it but it cannot be inferred from it.

40. (c); For I: Yes, it weakens the statement of manager as it is said by manager that increment will be based on performance i.e. hard work and determination. But 15% for all those employees who have completed 1 year undermines the statement by manager.
For II: No, it strengthens the statement by manager as performance chart has been prepared and appraisal will be done accordingly.
For III: Yes, it weakens because it is mentioned that punctuality is one of the key factor and if those who is punctual and those who gets relaxation time and both are considered as same, then it's a partiality for the punctual coming employee.

Directions (41-45): There is only one box is kept between box E and box having 25 pens. Box D is kept immediately above the box containing 63 pens. Box E does not contain 63 pens. Only three boxes are kept between box D and the box containing 12 pens.

	Case 1		Case 2		Case 3	
Position of box	Box	No. of pens	Box	No. of pens	Box	No. of pens
9th	D		D			
8th		63		63		
7th					D	
6th			E			63
5th		12		12		
4th		25		25		25
3rd						12
2nd	E				E	
1st						

Only two boxes are kept between box H and the box having 12 pens. More than three boxes are kept between box C and box H. The box having pens which is a perfect square of 3 is kept immediately above box C. The number of pens in box D is equal to the sum of the number of pens in box H and the box which is placed at 2nd position. (i.e. Box H contains 63 pens and 2nd position box contains 9 pens so total number of pens in box D is =(63+9)=72 pens but it is given that 9th position box contains number of pens which is a multiple of 10). So, case 1 and case 2 gets eliminated.

	~~Case 1~~		~~Case 2~~		Case 3	
Position of box	~~Box~~	~~No. of pens~~	~~Box~~	~~No. of pens~~	Box	No. of pens
9th	~~D~~	~~72~~	~~D~~	~~72~~		
8th	~~H~~	~~63~~	~~H~~	~~63~~		
7th					D	72
6th			~~E~~		H	63
5th		~~12~~		~~12~~		
4th		~~25~~		~~25~~		25
3rd						12
2nd	~~E~~	~~9~~		~~9~~	E	9
1st	~~C~~		~~C~~		C	

Only two boxes are kept between the box having 42 pens and box A. Box I is kept at the odd number position but immediately below box F. The number of pens in Box G is equal to the difference between the number of pens in box D and box I. Box B is kept above the box having 8 pens. Box G contains 21 less pens than box A contains.

	Case 3	
Position of box	Box	No. of pens
9th	G	60
8th	A	81
7th	D	72
6th	H	63
5th	B	42
4th	F	25
3rd	I	12
2nd	E	9
1st	C	8

41. (c); 42. (d); 43. (c);
44. (a); 45. (a);

46. (b); **For I:** Yes, as it is mentioned in statement that nowadays there are 4 major industries in Begusarai, then it is obvious employment will increase.

For II: No, we cannot say that there is no case of murder, kidnapping or extortion, we can only say it has been reduced. But this reduction has touch the figure of zero, it cannot be inferred.

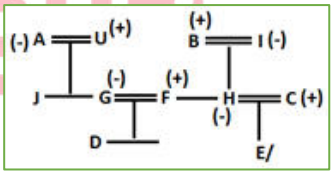
For III: Yes, as it is mentioned growth rate of Begusarai is top in Bihar and 5th among all districts in India, and Begusarai has moved from the phase of darkness. It clearly indicates that people of Begusarai are hardworking and keen to move forward.

For IV: No, it has been mentioned that nowadays Begusarai has 4 major industries but we cannot say that top industrialists have desire to have their industry in Begusarai.

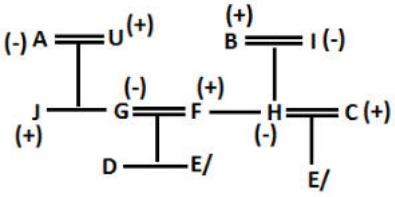
47. (d); I is an assumption. II is a suggestion but not a conclusion. Hence, neither I nor II follows.

Directions: (48-50):

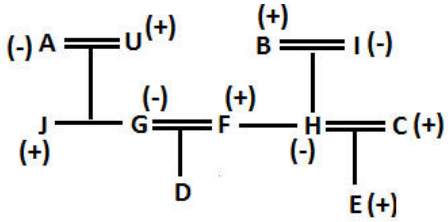
48. (e);



49. (b);



50. (d);



QUANTITATIVE APTITUDE

51. (b); Let number of notes on which 50% return is given and on which 80% return is given of PNB be 5x and 7x respectively.
ATQ,
7x – 5x = 1000
x = 500
So, number of notes on which 100% return is given by PNB = 15000 – (7 + 5) × 500
= 9000
Required % = $\frac{9000}{24000} \times 100 = 37.5\%$

52. (a); Let total number of notes received by BOI be 100x.
So, number of notes on which BOI gave 100% return = 75x
And number of notes on which BOI gave 50% return = $25x \times \frac{3}{8}$
ATQ,
$75x + \frac{75x}{8} = 13500$
$\Rightarrow$ x = 160
Hence, total amount received by BOI= 20×160×100
= Rs.3,20,000
And total amount received by Axis bank
= 20 × 10000 = Rs.2,00,000
Required difference = 3,20,000 - 2,00,000
= Rs.1,20,000

53. (c); Number of notes on which BOB gave 100% return
$= \frac{80}{100} \times 15000 = 12{,}000$
Number of notes on which BOB gave 80% return
$= (24000 - 12000) \times \frac{4}{5} = 9{,}600$
Required ratio = $\frac{9600}{12000} = 4 : 5$

54. (d); Total number of notes received by SBI
$= \frac{9{,}00{,}000}{20} = 45{,}000$
Total number of notes received by BOI
$= \frac{60}{100} \times 45000 = 27{,}000$
Required average = $\frac{15{,}000+45{,}000+10{,}000+27{,}000+24{,}000}{5}$
$= \frac{1{,}21{,}000}{5} = 24{,}200$

55. (e); Number of notes on which 100% return is given by PNB = $\frac{50}{100} \times 15000 = 7500$
Number of notes on which 50% return is given by PNB = $(15000 - 7500) \times \frac{5}{12} = 3125$
Number of notes on which 80% return is given by PNB = 15000 − 7500 − 3125 = 4375
Required amount = (15000 × 20) − (7500 × 20) − (3125 × 10) − (4375 × 16)
= 300000 − 150000 − 31250 − 70000
= Rs.48,750

56. (e); Let number of notes on which PNB gave 50% return and 80% return be 5x and 7x respectively.
ATQ,
$7x - 5x = 1500$
$x = 750$
So, number of notes on which PNB gave 100% return = $15000 - (7x + 5x)$
$= 15000 - 12 \times 750 \quad = 6000$
Now, number of notes on which Axis bank gave 80% return = $5 \times 750 - 1750$
= 2000
So, number of notes on which Axis bank gave 100% return = $10000 - 2000 - 2000 \times \frac{1}{4}$
= 7500
Required number of notes = 6000 + 7500
= 13500

57. (b); Let A's monthly salary be Rs.100x
So, A's expenditure on house rent = 30x
And, A's expenditure on clothing
$= (100x - 30x) \times \frac{40}{100} = 28x$
Monthly amount given by A to his son = $(100x - 30x - 28x) \times \frac{4}{14} = 12x$
ATQ,
$28x - 12x = 24000$
$x = 1500$
A's annual expenditure on house rent = 30 × 1500 × 12
= Rs.540000

58. (c); Let efficiency of A be x units/day.
So, efficiency of C = $\frac{400}{100} \times x$
= 4x units/day
And, efficiency of B = $4x \times \frac{3}{2}$
= 6x units/day
Now, total work = $33 \times x$ = 33x units
Required days = $\frac{33x}{x+6x+4x} = 3$ days

59. (d); Let amount invested by A be Rs.x
So, amount invested by B = $3 \times x$
= Rs.3x
And, amount invested by C = $3x \times \frac{1}{2}$
= Rs.1.5x
Now, profit sharing ratio of A : B : C
$= \big((x \times 11) + ((x - Y) \times 1)\big) : \big((3x \times 11) + ((3x - Y) \times 1)\big) : \big((1.5x \times 11) + ((1.5x - Y) \times 1)\big)$
$= (12x - Y) : (36x - Y) : (18x - Y)$

ATQ,

$\frac{18x-Y}{12x-Y+36x-Y+18x-Y} = \frac{35}{129}$

$\Rightarrow \frac{18x-Y}{66x-3Y} = \frac{35}{129}$

$\Rightarrow 774x - 43Y = 770x - 35Y$

$\Rightarrow x = 2Y$

Required profit sharing ratio = $\frac{12x-Y}{36x-Y}$

$= \frac{24Y-Y}{72Y-Y} \Rightarrow 23 : 71$

60. (e); Let initial quantity of milk and water in the vessel be 30x lit and 10x lit respectively.

Quantity of milk taken out from the vessel = $80 \times \frac{3}{4}$ = 60 lit

Quantity of water taken out from the vessel = $80 \times \frac{1}{4}$ = 20 lit

ATQ,

$\frac{(30x-60)+80}{10x-20} = \frac{700}{100}$

$\Rightarrow x = 4$

Hence, required original quantity of the vessel $= 30x + 10x$ = 160 lit

61. (b); Number of female employees in C who are newly recruited

$= \left(\left(2000 \times \frac{30}{100}\right) - 350\right) \times \frac{38}{100} = 95$

Number of male employees in C who are newly recruited = $95 \times \frac{3}{5} = 57$

Required % = $\frac{\left(\left(2000 \times \frac{30}{100}\right) - (95+57)\right)}{2000 \times \frac{30}{100}} \times 100$

$= \frac{600-152}{600} \times 100 = 74\frac{2}{3}\%$

62. (a); Male employees in company – Y = $\frac{400}{100} \times 350 = 1400$

Female employees in company – Y = $1400 \times \frac{3}{4}$ = 1050

Required difference = (1400 + 1050)–2000 = 450

63. (c); Female employees who left B

$= \left(\left(2000 \times \frac{25}{100}\right) - 225\right) \times \frac{16}{100} = 44$

Female employees in D = $\left(2000 \times \frac{20}{100}\right) - 160 = 240$

Required % = $\frac{(240+44)-240}{240} \times 100 = 18\frac{1}{3}\%$

64. (b); Male employees in company – K

$= \left(\left(2000 \times \frac{25}{100}\right) - 225\right) + 425 = 700$

Average number of female employees in A, C & D in company – X

$= \frac{1}{3} \times \left(\left(2000 \times \frac{75}{100}\right) - (240 + 350 + 160)\right)$

$= \frac{1}{3} \times (750) = 250$

Required difference = 700 – 250 = 450

65. (d); Employees who are in (18-40) age group in A

$= \left(2000 \times \frac{25}{100}\right) \times \frac{13}{25} = 260$

Employees who are in (18-40) age group in B

$= \left(2000 \times \frac{25}{100}\right) \times \frac{13}{50} = 130$

Employees who are in (18-40) age group in C

$= \left(2000 \times \frac{30}{100}\right) \times \frac{4}{5} = 480$

Employees who are in (18-40) age group in D

$= \left(2000 \times \frac{20}{100}\right) \times \frac{33}{40} = 330$

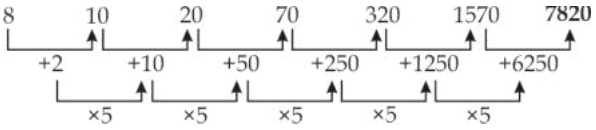
Employees who are in (40+) age group in A, B, C & D in company – X

$= 2000 - (260 + 130 + 480 + 330) = 800$

Required ratio = $\frac{(260+130+480+330)}{800} = 3 : 2$

66. (a); Wrong number = 7830

Pattern of series –



So, there should be 7820 in place of 7830.

67. (b); Here, the pattern followed is

18 × 1 +2 =20

20 × 2 +3 =43

43 × 3 +4 =133

133 × 4 +5 =537

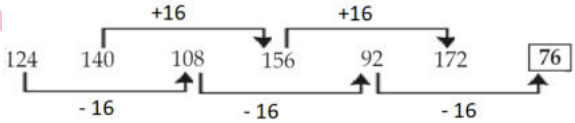
537 × 5 +6 =2691

2691 × 6 +7 =16153

So, wrong number is 16163 which should be replaced by 16153

68. (c); Wrong number = 78

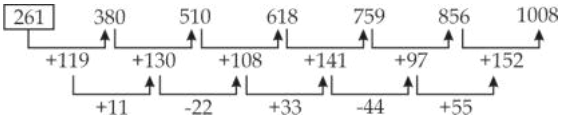
Pattern of series –



So, there should be 76 in place of 78.

69. (c); Wrong number = 260

Pattern of series –



So, there should be 261 in place of 260.

70. (e); Wrong number = 2515

Pattern of series –

267 + 343 = 610

343 + 610 = 953

610 + 953 = 1563

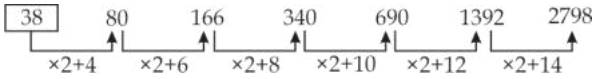
953 + 1563 = 2516

1563 + 2516 = 4079

So, there should be 2516 in place of 2515.

71. (b); Wrong number = 36

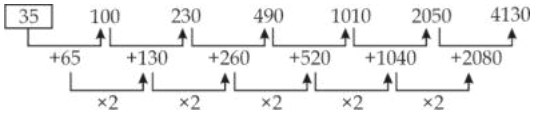
Pattern of series –



So, there should be 38 in place of 36.

72. (a); Wrong number = 30

Pattern of series –



So, there should be 35 in place of 30.

73. (b); Let present age of A and B be 20x years and 50x years respectively.

So, present age of C = $50x \times \frac{18}{25}$

= 36x years

And, present age of D = $36x \times \frac{13}{12}$

= 39x years

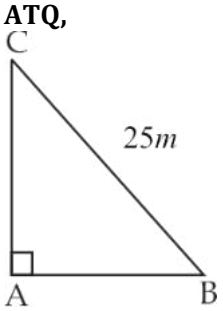
ATQ,

$50x - 39x = 11$

$x = 1$

Hence, present age of A = 20x = 20 years

74. (e); ATQ,



Perimeter of triangle ABC = 60

AB + BC + CA = 60

AB + 25 + CA = 60

⇒AB + CA = 35

Now, let length of AB be x m. (as AB is the smallest side)

So, length of CA = $(35 - x)m$

Now,

$(AB)^2 + (CA)^2 = (BC)^2$

$(x)^2 + (35 - x)^2 = (25)^2$

$\Rightarrow x^2 - 35x + 300 = 0$

$\Rightarrow x = 15, 20$

So, length of smallest side is 15m.

75. (a); Let cost price of article – M be Rs.100x.

So, marked price of article – M = $100x \times \frac{120}{100}$

= Rs.120x

And, selling price of article – M = $120x \times \frac{95}{100}$

= Rs.114x

ATQ,

$114x = 285 \Rightarrow x = 2.5$

Hence, cost price of article – N = $\frac{120}{100} \times 100 \times 2.5$

= Rs.300

So, selling price of article – N = $300 \times \frac{115}{100}$ = Rs.345

76. (c); Let number of black, red and white balls be a, b & c respectively.

From I:

ATQ,

$\frac{a}{a+b+c} = \frac{1}{6}$

⇒ 5a = b + c ...(i)

And, $\frac{b}{a+b+c} = \frac{1}{6}$

$\Rightarrow 5b = a + c$ ...(ii)

And, $\frac{c}{a+b+c} = \frac{2}{3}$

$\Rightarrow c = 2a + 2b$ ...(iii)

On solving (i), (ii) & (iii), we get:

a : b : c = 1 : 1 : 4

From II:

ATQ,

$\frac{c-1}{a+b+c-1} = \frac{15}{23}$

$\Rightarrow 8c = 15a + 15b + 8$

From I & II:

Let a, b & c be x, x & 4x respectively.

$\Rightarrow 32x = 15x + 15x + 8$

⇒ x = 4

Hence, t = 24

So, **statement I & II** together are necessary to answer the question.

77. (b); From I:

Amount invested by Deepak = $12000 \times \frac{5}{4}$

= Rs.15000

Profit sharing ratio of Shivam to that of Deepak = $(12000 \times 10) : (15000 \times 4)$

= 2 : 1

From II:

Let amount invested by Shivam and Deepak be Rs.4x and Rs.5x respectively.

And let period of investment of Shivam and Deepak be 5y months and 2y months respectively.

Now, profit sharing ratio of Shivam to that of Deepak = $(4x \times 5y) : (5x \times 2y)$ = 2 : 1

Now, let total profit be Rs.P.

ATQ,

$\frac{2-1}{3} \times P = 12000$

⇒ P = Rs.36000

Hence, profit share of Shivam=$\frac{2}{3} \times 36000$ = Rs.24000

Hence, **statement II** alone is sufficient to answer the question.

78. (c); From I:
Let cost price of the article be Rs.100x.
So, marked price of the article = $100x \times \frac{180}{100}$
= Rs.180x
And selling price of the article = Rs.(100x + 100)
From II:
Let marked price and discount allowed on the article be Rs.3y and Rs.y respectively.
From I & II:
3y = 180x
⇒ y = 60x
ATQ,
$100x + 100 = 180x - 60x$
⇒ x = 5
So, marked price of the article = 180x
= Rs.900
Hence, **statements I and II** together are sufficient to answer the question.

79. (e); Let rate of interest be R% p.a.
From I:
Let period of investment be t years.
ATQ,
(if sum is invested at SI); $\frac{6000 \times t \times R}{100} = 4500$
⇒ tR = 75
(if sum is invested at CI); $6000\left(1 + \frac{R}{100}\right)^t = 10500$
From II:
Let amount invested by Pankaj at SI and at CI be Rs.100x
ATQ,
$\left(P\left(\left(1 + \frac{R}{100}\right)^2 - 1\right)\right) - \left(\frac{P \times R \times 2}{100}\right) = 90$
$\Rightarrow PR^2 = 900000$
Hence, **statements I and II** together are not sufficient to answer the question.

80. (a); From I:
Let radius and height of cylinder be r cm and h cm respectively.
ATQ,
$2\pi rh = 1760$
$\Rightarrow rh = 280$ ....(i)
And, $2\pi r(r + h) = \frac{170}{100} \times 1760$
$\Rightarrow r^2 + rh = 476$ ...(ii)
On solving (i) & (ii), we get:
$r = 14,\ h = 20$
Hence, volume of cylinder = $\pi r^2 h$ = 12320 cm^3
From II:
Height of cylinder = $30 \times \frac{2}{3}$ = 20cm
ATQ,
$\pi r^2 \times 20 = 2 \times \frac{1}{3}\pi r^2 \times 30$
It can't be solved further.
Hence, **statement I** alone is sufficient to answer the question.

81. (c); Quantity I:
Total number of ways = $({}^8C_2 \times {}^4C_2) + ({}^8C_1 \times {}^4C_3) + ({}^4C_4)$
= 168 + 32 + 1 = 201
Quantity II:
3-digit numbers which are divisible by 3 and ends with an even number = (102, 108, 114, -------, 996)
Required number of 3 – digit numbers= $\frac{996-102}{6}+1$
= 150
So, Quantity I > Quantity II.

82. (a); Quantity I:
ATQ,
$\frac{5900 \times R \times 3}{100} = 3186$
$\Rightarrow R = 18\%$
Required interest = $\frac{7900 \times (18+5) \times 3}{100}$ = Rs.5451
Quantity II:
Equivalent rate of interest of 13% p.a. for 2 years at CI = $13 + 13 + \frac{13 \times 13}{100}$ = 27.69%
ATQ,
$\frac{X \times 27.69}{100} = 2325.96$
⇒ X = Rs.8400
So, Quantity I < Quantity II.

83. (c); Quantity I:
Let CP & MP of an article be Rs.19x and Rs.30x respectively.
ATQ,
$19x \times \frac{120}{100} = 912$
$\Rightarrow x = 40$
Required difference = $30x \times \frac{24}{100} - 19x \times \frac{20}{100}$
= $7.2x - 3.8x$ = Rs.136
Quantity II:
Let cost price of the article be Rs.100x
So, marked price of the article = $100x \times \frac{170}{100}$
= Rs.170x
And, selling price of the article = $170x \times \frac{60}{100}$
= Rs.102x
ATQ,
$102x = 183.6$
$\Rightarrow x = 1.8$
Required sum = $170x \times \frac{40}{100} + (102x - 100x)$
= $68x + 2x$ = Rs.126
So, Quantity I > Quantity II.

84. (e); Quantity I:

Let speed of boat in still water & speed of stream be '11x km/hr.' and 'x km/hr.' respectively.

ATQ,

$\frac{480}{11x-x}+\frac{480}{11x+x}=11$

$\Rightarrow x=8$

So, speed of boat in still water = 11x = 88 km/hr.

Quantity II:

Let speed of boat in still water & speed of stream be 'a km/hr.' and 'b km/hr.' respectively.

ATQ,

$\frac{350}{3.5}=(a+b)$

$\Rightarrow (a+b)=100$ ...(i)

And, $\frac{380}{5}=(a-b)$

$\Rightarrow (a-b)=76$ ...(ii)

On solving (i) & (ii), we get:

a = 88 km/hr.

So, Quantity I = Quantity II.

85. (c); Quantity I:

Let A's present age be 10x years.

So, B's present age = $10x\times\frac{160}{100}$

= 16x years

And, C's present age = $16x\times\frac{2}{5}$ = 6.4x years

And, D's present age = $2\times 6.4x$

= 12.8x years

ATQ,

$16x-12.8x=8$

$\Rightarrow x=2.5$

Hence, required average = $\frac{10x+16x+6.4x+12.8x}{4}$

= 11.3x = 28.25 years

Quantity II:

Let present age of P be p years.

So, present age of R = $(p-15)$ years

ATQ,

Present age of Q = $\big(2\times(p-15)\big)-p$

= $(p-30)$ *years*

Now, $(p+4)=2\times(p-30+4)$

$\Rightarrow p=56$

Hence, present age of R = $(p-15)$ years

= 41 years

And, present age of Q = $(p-30)$ *years*

= 26 years

So, required age = 26 years

So, Quantity I > Quantity II.

86. (b); Let total number of applicants in A be 100x.

So, total number of applicants in E = 70x

Female applicants who applied for renewal of passports from A = $100x\times\frac{60}{100}\times\frac{40}{100}$ = 24x

Female applicants who applied for new passports from A = $100x\times\frac{40}{100}\times\frac{3}{10}$ = 12x

Female applicants who applied for renewal of passports from E = $70x\times\frac{70}{100}\times\frac{60}{100}$ = 29.4x

Female applicants who applied for new passports from E = $70x\times\frac{30}{100}\times\frac{1}{3}$ = 7x

Required ratio = $\frac{24x+12x}{29.4x+7x}=\frac{36x}{36.4x}$ = 90 : 91

87. (b); Let number of male and female who applied for new passports from C be 2x and 3x respectively.

ATQ,

$3x-2x=800$

$x=800$

Total number of applicants for passports from C

= $(3\times 800+2\times 800)\times\frac{100}{50}$ = 8000

Total female who applied for passports from C

= $8000\times\frac{50}{100}\times\frac{50}{100}+(3\times 800)$ = 4400

Total male who applied for passports from C

= $8000-4400=3600$

Required % = $\frac{4400}{3600}\times 100=122\frac{2}{9}\%$

88. (e); Let total number of applicants in A be 100x.

ATQ,

$100x\times\frac{60}{100}\times\left(\frac{60}{100}-\frac{40}{100}\right)=2400$

$12x=2400$

$x=200$

Hence, number of applicants who applied for new passport from A = $100\times 200\times\frac{40}{100}$ = 8000

89. (a); ATQ,

Total applicants from B = $3600\times\frac{100}{40}\times\frac{100}{45}$

= 20000

Total applicants from E = 20000 + 5000 = 25000

Required number of applicants = $20000\times\frac{55}{100}+25000\times\frac{30}{100}$ = 18500

90. (c); Let total number of applicants from C & E be 100x & 100y respectively.

ATQ,

$100x+100y=30000$

$x+y=300$ ....(i)

Now, $100x\times\frac{50}{100}\times\frac{50}{100}-100y\times\frac{70}{100}\times\frac{60}{100}=800$

$25x-42y=800$ ....(ii)

On solving (i) & (ii), we get:

$x=200,\ y=100$

Required average

= $\frac{1}{2}\times\left(\left(100\times 200\times\frac{50}{100}\right)+\left(100\times 100\times\frac{30}{100}\right)\right)$

= $\frac{1}{2}\times(10000+3000)=6500$

91. (e); Let total number of applicants from A & C be 100x & 100y respectively.

ATQ,

Applicants who applied for new passports from A

$= 100x \times \frac{40}{100} = 40x$

Applicants who applied for new passports from C

$= 100y \times \frac{50}{100} = 50y$

Now, $\frac{40x}{50y} = \frac{2}{3} \Rightarrow \frac{x}{y} = \frac{5}{6} \Rightarrow y = \frac{6x}{5}$

Required % $= \frac{100 \times \frac{6x}{5} - 100x}{100x} \times 100$

$= \frac{120x - 100x}{100x} \times 100 = 20\%$

92. (e); Required probability $= \left(\frac{({}^{48}C_1 \times {}^{4}C_1) + {}^{48}C_2}{{}^{52}C_2}\right)$

$= \frac{192 + 1128}{1326} = \frac{220}{221}$

93. (c); 2nd year CI

$= \left(50000\left(1 + \frac{12}{100}\right)^2 - 50000\right) - \left(50000 \times \frac{12}{100}\right)$

= 12720 – 6000 = Rs.6720

Now, 2nd year SI = 6720 – 2220 = Rs.4500

Now, R $= \frac{4500}{75000} \times 100 = 6\%$

94. (a); let speed of train Y be 's' kmph & length of train X & Y be a & b m respectively

ATQ, $\frac{a+b}{120} = (s - 120) \times \frac{5}{18}$ .....(i)

$\frac{a+b}{\frac{40}{3}} = (s + 120) \times \frac{5}{18}$ .....(ii)

On dividing (i) by (ii)

$\frac{1}{9} = \frac{s-120}{s+120}$

S = 150 kmph

95. (e); Let unit's digit and ten's digit of the original number be 'x' and 'y' respectively.

So, original number $= 10y + x$

ATQ,

$10x + y - (10y + x) = 27$

$\Rightarrow 9x - 9y = 27$

$x - y = 3$ ...(i)

And, $x^2 - y^2 = 33$

$(x - y)(x + y) = 33$ ...(ii)

On solving (i) & (ii), we get:

$(x + y) = 11$ ...(iii)

On solving (i) & (iii), we get:

$x = 7,\ y = 4$

So, original number = 47

Sol (96-100): Let distance between Delhi – Bangkok be 10x km.

So, Distance between Dhaka – Bangkok $= 10x \times \frac{80}{100} = 8x$ km

And, distance between Delhi – Dhaka $= 8x \times \frac{27}{32} = \frac{27x}{4}\ km$

ATQ,

$10x + 8x + \frac{27x}{4} = 19800$

$\Rightarrow x = 800$

Delhi – Dhaka fare:

Let fare of B be Rs.4a

So, fare of C $= 4a \times \frac{125}{100}$ = Rs.5a

And, fare of A $= Rs.(4a - 2700)$

Now,

$\frac{4a - 2700}{5a} = \frac{3}{5}$

$\Rightarrow$ a = 2700

Delhi – Bangkok fare:

Total fare of A & B = 20000 × 2 = Rs.40000

Fare of C = 8000 + 20000 = Rs.28000

Fare of B = 26000 × 2 − 28000 = Rs.24000

Fare of A = 40000 − 24000

= Rs.16000

Dhaka – Bangkok fare:

Fare of B = Rs.16000

Fare of A = 16000 × $\frac{6}{5}$ = Rs.19200

Fare of C = 16000 × $\frac{8}{5}$ = Rs.25600

Routes	Distance (in km)	A's fare (in Rs.)	B's fare (in Rs.)	C's fare (in Rs.)
Delhi – Dhaka	5400	8100	10800	13500
Delhi – Bangkok	8000	16000	24000	28000
Dhaka – Bangkok	6400	19200	16000	25600

96. (b); Total fare if Veer uses A for his trip = 8100 + 19200

= Rs.27300

Total fare if Veer uses B for his trip = 10800 + 16000

= Rs.26800

Total fare if Veer uses C for his trip = 13500 + 25600

= Rs.39100

So, the cheapest option for Veer is flight operator B.

97. (d); ATQ,

Total fare paid by Deepak = 25600 + 28000

= Rs.53600

Required amount $= \frac{53600}{6400 + 8000}$ = Rs. 3.62/km

98. (d); ATQ,

Fares for (A, Delhi – Bangkok) = Rs.16000
Fares for (C, Delhi - Dhaka) = Rs.13500
Fares for (B, Dhaka - Bangkok) = Rs.16000
Fares for (A, Dhaka - Bangkok) = Rs.19200
Fares for (B, Delhi - Dhaka) = Rs.10800
So, for (A, Dhaka - Bangkok) fares will be maximum.

99. (b); ATQ,

Per km fare of A = $\frac{19200}{6400}$ = Rs.3/km
Per km fare of B = $\frac{16000}{6400}$ = Rs.2.5/km
Per km fare of C = $\frac{25600}{6400}$ = Rs.4/km
So, per km fare of B is lowest.

100. (e); Required average = $\frac{8100+10800+13500}{3}$ = Rs.10800

ENGLISH LANGUAGE

101. (b); To validate the answer, refer to the first paragraph, which mentions, "*Music is assumed to be a fortuitous by-product of this evolutionary development, and is more fully processed in the brain's right hemisphere, which is more associated with the representation of emotions than the left hemisphere*." Referring to the quoted text, we can infer that the statement given in option (b) is appropriate in context of the given question. Hence, option (b) is the most suitable answer choice.

102. (d); The answer can be validate from various statements given in paragraph four. Among the given statements, only the statement (d) cannot be inferred from the passage. Hence, option (d) is the most suitable answer choice.

103. (c); The entire passage is centered around inability of certain people to enjoy music inspite of having normal brain functioning. Here, the most suitable statement to justify the central idea of the passage would be "*While music may be the universal language, it doesn't speak to everyone*". Also, the statement (ii) is correct in context of the passage. Hence, option (c) is the appropriate answer to the given question.

104. (c); To validate the answer, refer to the second paragraph, which mentions, "*It has been theorised that aesthetic responses to music may derive from the similarity of musical tones to tonal characteristics of human speech associated with different emotional states. If so, it would be hypothesised that the pleasure one finds in music would be related to skills in and enjoyment of social intercourse. Conversely, a lack of musical appreciation would predict deficiencies in social engagement*". Referring to the quoted text, we can infer that the statement given in option (c) is correct in context of the given question.

105. (d); Among the given phrases, the most appropriate phrase to fit in the given blank will be "". Apart from this, no other phrase could make a grammatically correct and contextually meaningful statement. Hence, option (d) is the most suitable answer choice.

106. (a); Here, only in sentence (A) both the words fit in to form a contextually and grammatically correct statement. Hence, option (a) is the most suitable answer choice.

Equip: "supply with the necessary items for a particular purpose."
Arm: "each of the two upper limbs of the human body from the shoulder to the hand."
AND "a thing comparable to an arm in form or function, typically something that projects from a larger structure."

107. (d); Here, only in sentences (A) & (B), both the words fit in to form a contextually and grammatically correct statement. Hence, option (a) is the most suitable answer choice.

Study: a detailed investigation and analysis of a subject or situation.
Ponder: think about (something) carefully, especially before making a decision or reaching a conclusion

108. (e); Here, both the words fit in all the three statements to make the sentences grammatically and contextually correct. Hence, option (e) is the most suitable answer choice.

Anomaly: "something that deviates from what is standard, normal, or expected."
Departure: "a deviation from an accepted, prescribed, or usual course of action"/ "the action of leaving, especially to start a journey

109. (c); Here, only in sentences (A) & (B), both the words fit in to form a contextually and grammatically correct statement. Hence, option (a) is the most suitable answer choice.
Accolade: "an award or privilege granted as a special honour or as an acknowledgement of merit."/ "a touch on a person's shoulders with a sword at the bestowing of a knighthood"
Recognition: "identification of someone or something or person from previous encounters or knowledge"/ "acknowledgement of the existence, validity, or legality of something"/ "appreciation or acclaim for an achievement, service, or ability"

110. (e); Both the words fit in only in statement B to form a grammatically and contextually correct statement. Hence, option (e) is the most suitable answer choice.
Pinnacle: the most successful point; the culmination/ a high, pointed piece of rock
Height: the measurement of someone or something from head to foot or from base to top./

111. (d); Among the given words, "**bravery**" is synonym of valour and **cowardice** is antonym of valour. Hence, option (d) is the most suitable answer choice.

112. (e); Among the given words, "**restrain**" is synonym of impede and **expedite** is antonym of impede. Hence, option (e) is the most suitable answer choice.

113. (c); Among the given words, "**acknowledge**" is synonym and **disparage** is antonym of **appreciates**. Hence, option (c) is the most suitable answer choice.

114. (b); Among the given words, "**graceful**" is synonym and **gauche** is antonym of **elegant**. Hence, option (b) is the most suitable answer choice.

115. (d); The correct answer choice will be (d). Here, 'loathe' is synonym of 'abhor' whereas 'admire' is its antonym.
Abhor: regard with disgust and hatred.
Loathe: feel intense dislike or disgust for

116. (a); Here, the error lies in part (C) of the statement, where "dare call" will be replaced with "dares to call". Here, 'dare' has been used as main verb and will therefore qualify the singular noun, which is 'no one'. 'Dare' will then be followed by 'to+v1'. But when 'dare' and 'need' are used as modal auxiliary, then we do not add '-s' to make it singular. Then we direct use 'to' after them. Hence, option (a) is the most suitable answer choice.

117. (d); Here, "his" will be replaced with "him" because verbs like "heard, watch, behold, see, let, make, bid" will be followed by objective case pronouns and in case we use infinitive then it is used without "to" (bare infinitive). Hence, option (d) is the most suitable answer choice.

118. (d); Here, the error lies in the last part of the statement where "tomorrow" will be changed to "the next day" because in indirect narration, 'tomorrow' is changes to 'on the tomorrow' or 'the next day'. Hence, option (d) is the most suitable answer choice.

119. (e); The given statement is grammatically correct and does not require any changes. Hence, option (e) is the most suitable answer choice.

120. (b); Here, the error lies in part (D) of the statement where "would not" will be replaced by "had not" because in cases of situations denoting unfulfilled wishes/ desires of past, in conditional clause, we use 'if+subject+had+v3' or 'had+subject+v3'. Hence, option (b) is the most suitable answer choice.

121. (e); The answer for the given question can be traced fourth and fifth paragraph "*A major cause of the slowdown of sales in 2019-20 was the difficulty in the availability of finance due to problems in the financial sector. The decade saw the introduction and acceptance of shared platform operators like Uber and Ola…Diesel car sales had risen earlier in the decade, but are now in decline. Meeting Bharat VI norms has added considerably to cost. In addition, the Supreme Court ordered that diesel cars older than 10 years would not be allowed in the NCR".* Hence, option (e) is the correct answer choice.

122. (d); The answer can be verified from the 2nd paragraph. Refer to the lines "*Intense competition in the market saw all manufacturers launching or upgrading existing models in fairly short intervals. The industry became more like that of a developed country. Competition also led to better technology benefiting the consumer. The average fuel efficiency of cars increased from about 16 km per litre to 19.2 km per litre. This resulted not only in reducing fuel consumption but also lowered CO2 emissions.*" Hence, option (d) is the correct answer choice.

123. (c); The most appropriate phrase to complete the given blank is "partly explains the slowing of growth". The previous sentence of the blank mentions about the implementation of Bharat VI which is a measure for safety and emission standards. Further the sentence states that due Bharat VI there has been an increase in the cost of vehicles; thus, this should ultimately result in the decline of the sales growth. Hence, option (c) will be most viable choice to complete the given sentence.

124. (b); Statement (II) is incorrect as in the given passage it is stated that "The entry of global players into the Indian market and cars being of international standards led to exports increasing to 680,000 vehicles in 2018-19.' Statements (I) and (III) are true in the context. Hence, option (b) is the correct answer choice.

125. (b); The most suitable word that expresses the meaning of the highlighted word is "catalyst". Hence, option (b) is the correct answer choice.
Driver means a factor which causes a particular phenomenon to happen or develop.
Straphanger means any user of such public transportation.
Catalyst means a person or thing that precipitates an event.
prototype means a first or preliminary version of a device or vehicle from which other forms are developed.
Chauffer means a person employed to drive a private automobile or limousine for the owner.

126. (d); 'X' was although a valuable employee for the company yet his attitude towards company's initiative was negative and he wanted to develop similar feeling among his colleagues. Hence, 'pessimist' which means 'tending to see the worst aspect of things or believe that the worst will happen' best defines 'X's' attitude towards the initiative.
Empathetic: showing an ability to understand and share the feelings of another
Scientific: based on or characterized by the methods and principles of science
Passionate: having, showing, or caused by strong feelings or beliefs.
Discreet: intentionally unobtrusive

127. (e); Here, as per the given situation, all the given options define 'Y' as a person. Hence, option (e) is the most suitable answer choice.

128. (b); As per the given situations, both the goats were not willing to give way to each other and therefore has to face the consequences. From the situation, we can infer that the goats were stubborn. Hence, option (b) is the most suitable answer choice.
Intuitive: using or based on what one feels to be true even without conscious reasoning; instinctive
Stubborn: having or showing dogged determination not to change one's attitude or position on something
Persuasive: good at persuading someone to do or believe something through reasoning or the use of temptation
Epicurean: relating to or suitable for an epicure.

129. (d); Among the given options, "generous" which means "showing kindness towards others." defines the nature of the child who willingly visited the animal shelter for donation. Hence, option (d) is the most suitable answer choice.
Creative: having good imagination or original ideas
Courageous: not deterred by danger or pain; brave
Dramatic: (of an event or circumstance) sudden and striking

130. (b); Among the given options, "faithful" is the most suitable answer choice to define the nature of the dog which was loyal towards its owner. Hence, option (b) is the most suitable answer choice.
Honest: free of deceit; truthful and sincere.
Faithful: remaining loyal and steadfast
Cultured: characterized by refined taste and manners and good education
Notorious: famous or well known, typically for some bad quality or deed.

131. (d); Reading the second paragraph of the passage, we can conclude the answer to be (c). The lines have been mentioned below for reference:
"**But it should carry out, along with international investigators, a thorough probe into what led to the "accident", and punish whoever is responsible for the "human error.**"
"**If Iran is sincere in its apology, it should not only unearth what happened and punish the culprits but also take immediate steps to reduce tensions with the U.S.**"

132. (c); The given passage talks about data protection law implemented In California and hence the only option to satisfy it will be (c).

133. (b); Reading the last paragraph of the passage, we can deduce the answer to be (b). The lines have been mentioned below for reference:
"After initially rejecting western assertion that an Iranian missile brought down the plane, Tehran on Saturday said one of its soldiers fired the missile, mistaking the jet for an enemy aircraft "as it turned to a sensitive area."

134. (b); Among the given words, '**vengeance**' which means characterized by a desire for revenge is similar to '**retaliatory'**. Hence, option (b) is the most suitable answer choice.
Hostility: unfriendliness or opposition
Redemption: the action of saving or being saved from sin, error, or evil.
Brisk: active and energetic.

135. (c); Reading the last paragraph of the passage, we can conclude the answer to be (c). The lines have been mentioned below for reference:
"**Mr. Trump unilaterally pulled the U.S. out of the Iran nuclear deal, in May 2018, was worth the risk**."
Rest of the options given in the passage are untrue or do not make any contextual sense.

136. (b); The most suitable word to fill the blank (A) as well as the blanks of the given sentences is "proliferating" which means increase rapidly in number; multiply. All the other words are irrelevant. Hence, option (b) is the correct answer choice.

137. (a); To make the sentence grammatically and contextually correct, interchange the words positions at (1) and (2) i.e., estimated and launched. All the other words are correct. Hence, option (a) is the correct answer choice.

138. (e); All the parts of the italicized sentence are correct. Hence, option (e) is the most suitable answer choice.

139. (d); The given sentence consist a conjunction "while" which is used to indicate a contrast in the sentence. The latter part of the sentence "*while the remaining prefer to use the internet only for product research, communication, entertainment and other purposes"* indicates that the initial part of the sentence must mention a dichotomy. Thus, among the given options, option (d) becomes the most viable answer choice.

140. (a); The most suitable word to replace the highlighted incorrect word is "virtual". "virtual" means almost or nearly as described, but not completely or according to strict definition. All the other words are either grammatically incorrect or contextually meaningless.

Mock 13

SBI Clerk Mains 2018

REASONING ABILITY

Directions (1-5): Study the following information carefully and wer the questions given below.
There are eight members i.e. A, B, C, D, E, F, G and H are sitting around a square table such that four of them likes flowers i.e. Lily, Rose, orchid and Sunflower and four of them likes fruits i.e. Mango, Kiwi, Apple, Banana but not necessarily in the same order. Those who likes Fruits sits at the corner and those who like flower sits at the middle of the table. Some of them face inside and some of them face outside.
The one who likes Orchid sits third to the right of H. A sit second to the right of the one who likes Orchid. A is not the immediate neighbour of H. The one who likes Banana is an immediate neighbour of A. The one who likes Banana sits opposite to the one who likes Kiwi. H does not like Kiwi. The one who likes Apple sits second to the left of the one who likes Kiwi, who is not the immediate neighbour of A. B sits third to the right of the one who likes Apple. F likes Lily. Only one person sits between B and the one who likes Sunflower. F faces the one who likes Sunflower. E and G sits opposite to each other. E does not like Banana. C sits second to the right of G. C does not face Inside. C and D face same direction as G.

1. A like which of the following item?
(a) Mango (b) Rose (c) Kiwi
(d) Sunflower (e) None of these

2. Who among the following sits second to the right of C?
(a) The one who likes Kiwi
(b) D
(c) The one who likes Banana
(d) The one who likes Lily
(e) Both a and b

3. Which of the following is not true regarding F?
(a) F faces the one who likes Sunflower.
(b) F and G faces opposite direction.
(c) F sits second to the right of the who likes Orchid.
(d) F and E are immediate neighbours.
(e) All are correct

4. How many persons sit between A and B when counted from the left of A?
(a) Three (b) One (c) Two
(d) Four (e) None of these

5. Who among the following sits third to the left of D?
(a) H (b) C (c) G
(d) B (e) None of these

Directions (6-10): Study the following information carefully to wer the given questions.
A number arrangement machine when given an input line of numbers rearranges them following a particular rule in each step. The following is an illustration of input and rearrangement.
Input: **95 11 76 21 89 42 64 31**
Step I: 02 76 21 89 42 64 31 04
Step II: 03 02 76 42 64 31 04 01
Step III: 04 03 02 42 64 04 01 01
Step IV: 06 04 03 02 04 01 01 02
Step IV, is the last step.
Input: 75 12 10 94 84 32 63 42 54 22

6. How many steps are required to complete the given arrangement?
(a) III (b) V (c) IV
(d) VI (e) None of these

7. How many elements are there between '03' and '42' in step-II?
(a) Two (b) One (c) Three
(d) Four (e) None of these

8. Which number would be at the fourth position from the left end in the last step of the output?
(a) 04 (b) 05 (c) 64
(d) 02 (e) None of these

9. What is the sum of the third element from the left in step II and 2nd from the right in the last step?
(a) 78 (b) 76 (c) 65
(d) 83 (e) None of these

10. What is the difference between the third element from the right in step IV and the fourth element from the left in step III?
(a) 21 (b) 24 (c) 28
(d) 19 (e) None of these

Directions (11-15): Study the following information carefully and wer the questions given below.
Six Horses i.e. A, B, C, D, E, F are standing in a row facing north at a distance which is a successive multiple of 4 in an increasing order from the left. Horse F is second to the right of Horse C. The total distance between Horse E and D is 52m. Only one Horse stands in between Horse B and Horse E. Horse F and Horse D are Standing next to each other. Horse A and Horse F are not standing next to Horse B. Now Horse B starts moving towards north direction after

moving 10m its takes a right turn and stops at point T after moving 28m. Horse A starts moving in east direction and after going 12m it turns right and move 20m and then again turn right and move 72m and stops there at point H. Horse C starts moving in south direction and after moving 10m it takes a left turn and moves 20m then it again takes a left turn and moves 5m. From there it takes a right turn and moves 24m and stops at point V.

11. What is the shortest distance between Point V and point H?
(a) 10m (b) 15m (c) 5m
(d) 20m (e) None of these

12. In which direction and at what distance is point H with respect to F's initial position?
(a) 20m south (b) 20m, North
(c) 2m, Southeast (d) 20m, Northwest
(e) None of these

13. If horse D, moves 5m in the south direction and reaches point K then point V is in which direction with respect to point K?
(a) Southeast (b) North (c) East
(d) West (e) None of these

14. What is the total distance between Horse E and Horse A?
(a) 74m (b) 80m (c) 84m
(d) 88m (e) None of these

15. In which direction is point T with respect to point H?
(a) North (b) Southwest (c) South
(d) East (e) Northwest

Direction (16-20): Study the following information and wer the given questions:
In alphabetical series each consonant is assigned a different number from 1-7 (for ex- B is coded as 1, C-2…….J-7)and again those numbers get repeated(for ex- K-1, L-2…….so on).
Besides the above information, following operations are to be applied for coding the words given in the questions below.
Each letters of the given questions will be coded as per the given conditions:

I. Vowels appearing before 'M' in the Alphabetical series will be coded as '**'.
II. Vowels appearing after 'M' in the alphabetical series will be coded as '$$'.
III. Number preceded by vowel will be coded as '#1'.
IV. No. followed by vowel will be coded as '@#'.

16. What will possibly be the code for 'NORMAL'?
(a) '#1$$@##2**@#
(b) '#1$$@##1**@#
(c) '#3$$@##1**@#
(d) '#1$#@##1**@#
(e) None of these

17. What will possibly be the code for 'EMBARKS'?
(a) **@##1**@#12
(b) **@##1**@#31
(c) **@##1**@#41
(d) **@##1**@#11
(e) None of these

18. What will possibly be the code for 'SMITTLE'?
(a) 1#1**@#2#1**
(b) 1#1**@#2#11*
(c) 1#1**@#2#1*1
(d) 2#1**@#2#1**
(e) None of these

19. What will possibly be the code of 'ANNUAL'?
(a) **@##1$$**@#
(b) *1@##1$$**@#
(c) **##@1$$**@#
(d) *2@##1$$**@#
(e) None of these

20. What is the code for 'PROM'?
(a) 5#1$$@# (b) 2#1$$@#
(c) 4#1$$@# (d) 6#1$$@#
(e) None of these

Directions (21-25): Study the following information carefully and wer the questions:
There are three compartments A, B, C such as compartment A is in west of compartment B and compartment A and compartment B is in west of compartment C. Twelve boxes P, Q, R, S, V, X, Y, Z, K, L, M, N are placed in three different compartments such as four boxes are placed in each compartment . And these four boxes are placed one above another. Only one box is placed in between V and Z in compartment B. R is placed on top in compartment A. Box Y is in the immediate west of L. Box L is placed between box M and N. M is placed above N. Two boxes are placed between R and S in same compartment. Box Q is placed immediately above P in the same compartment. Box X is placed above box V and Z in the same compartment. Box V is placed above box Z.
These boxes are shifting in other compartments as per the cards drawn and only two cards drawn at a time -

I. If both the card drawn is heart then the box placed at the top in compartment B will be interchanged with the box placed at the bottom of Compartment C.
II. If among the card drawn one is diamond and another is spade then the box which is second from the bottom in Compartment A will be inter changed with box placed at second from the top in Compartment C.
III. If among the two cards drawn one is Club and another is Heart then the box placed at top and the box placed at the bottom will be interchanged in compartment B.
IV. If among the two cards drawn one is club and another is diamond then the box which is third from the bottom in compartment B is interchanged with the box which is third from the top in compartment A.

The Cards Drawn are---
1. Club-Heart
2. Heart-Heart
3. Club-Diamond
4. Spade-Diamond

Note- The cards will be drawn in the given serial order.

21. Which of the following box is placed at the bottom of Compartment C after the rearrangement?
(a) Box K (b) Box L (c) Box M
(d) Box Z
(e) None of these

22. Which of the following is to the west of box P after the rearrangement?
(a) Box Q (b) Box R (c) Box M
(d) Box S (e) None of these

23. Which of the following box is kept at the top in compartment B after the rearrangement?
(a) Box X (b) Box N (c) Box Y
(d) Box V (e) None of these

24. How many boxes are below box V in its respective compartment after the rearrangement?
(a) Three (b) Two (c) One
(d) None (e) None of these

25. Which of the following combination of 'Box-compartment' before the rearrangement is correct?
(a) Box R- C (b) Box N- A (c) Box V- C
(d) Box N- C (e) All are correct

26. Statement- Indian Metrological Department has forecasted that there will be a situation of flood in City A within the next 15 days.
Course of Action- I. The population of city A should move to city B within next 15 days to get rid of the problem.
II. The people of city A are advised to preserve necessary items for future consumption.
(a) Only II (b) Both I and II
(c) Only I (d) Neither I nor II
(e) None of these

Direction (27-30): There are two rows given and to find out the resultant of a particular row we need to follow the following steps: -
Step 1: If an even number is followed by an odd number then the resultant will be the addition of both the numbers.
Step 2: If an odd number is followed by a perfect square then the resultant will be the difference of that square number and the odd number.
Step 3: If an odd number is followed by another odd number (but not a perfect square) then the resultant will be the addition of both the numbers.
Step 4: If an odd number is followed by an even number (but not a perfect square) then the resultant comes by multiplying the numbers.
Step 5: If an even number is followed by another even number then the resultant will be the division of first number by the second number.

27. Find the sum of two rows
8 4 1
11 6 7
(a) 78 (b) 52 (c) 64
(d) 76 (e) None of the above

28. If the sum of the resultants of two rows is 46. Then find the value of X.
9 2 7
24 4 X
(a) 16 (b) 27 (c) 8
(d) 15 (e) None of the above

29. Find the difference between the resultant of first and second row.
13 3 7
4 11 12
(a) 117 (b) 126 (c) 157
(d) 96 (e)None of the above

30. Find the multiplication of the resultant of first and second row.
21 19 8
16 13 9
(a) 110 (b) 85 (c) 100
(d) 120 (e)None of the above

Directions (31-34): Study the following information carefully and wer the questions.
Six subjects Hindi, English, chemistry, Mathematics, Physics and Biology are taught at a coaching institute. Each subject was given a definite and continuous time slots. (i.e. there is no gap between two consecutive subjects). In a day a total 14 hours class was scheduled. A subject can start its slot from a whole hour or half hour only (i.e. a subject can start from 4 pm, 4 : 30 pm but it cannot starts from 4:13 pm, 4:03 pm) Hindi class takes place from 11 am to 12:30 pm. Only one class took place between Hindi and Mathematics. Time slot of Mathematics is twice the time slot of Hindi. Physics classes starts from 5:30 pm. Chemistry class took place between Hindi and Physics, but it did not take place immediately after or before Physics. Total slot time of English and Biology class is 4.5 hours. Number of classes that took place between Biology and Physics is same as the number of classes between chemistry and Biology. Time slot of Chemistry is 1 hour less than the time slot of Mathematics.

31. How many lectures are scheduled between Hindi and Biology?
(a) None (b) One (c) Two
(d) Three (e) More than three

32. Which of the following subject's time slot is scheduled from 12:30-2:30 pm?
(a) English (b) Chemistry (c) Biology
(d) Math's (e) None of these

33. Which of the following subject is scheduled just after English?
(a) Hindi (b) Chemistry (c) Biology
(d) Math's (e) None of these

34. What is the duration (in hours) of the Physics' lecture?
(a) 2.5 hour (b) 3 hour (c) 3.5 hour
(d) 1.5 hour (e) 2 hour

Direction (35-37): In the following questions, the symbols #, &, @, * , $, % and © are used with the following meanings as illustrated below. Study the following information and wer the given questions:
A@B- A is the child of B.
A©B- A is the parent of B
A%B- A is father-in-law of B
A&B- A is brother-in-law of B
A$B- A is brother of B
A*B- A is wife of B
A#B- A is sister-in-law of B

35. If X©F$D&Q@H©E&F, then how is F related to H?
(a)father (b)Brother-in-law
(c)son-in-law (d)Sister
(e)None of these

36. If G*J$K©Y@V&C#G then how J is related to C?
(a) father (b) Brother-in-law
(c) daughter-in-law (d) Brother
(e) None of these

37. If K&L%M*N@O then how is N related to K?
(a)father (b) Uncle (c) Nephew
(d)Sister (e)None of these

Directions (38-41): Study the following information carefully and wer the questions given below.
Nine persons K, L, M, N, O, P, Q, R, S are going to gym on three dates 8, 17, 25 of three different month January, March and April of same year. Also each of them is of different weight. Only three persons are heavier than S. Q is going to gym immediately after N but not in the same month as N. Only one person go to gym in between O and R and all go in the same month. K is just heavier than M but lighter than Q. L is heavier than S but lighter than N who is not the heaviest. Only three persons go to gym in between L and S but none of them go to gym in a month having 30 days. The one who go immediately after O is not lighter than O. The one who is the lightest person attend gym immediately after L. As many persons go to gym in between N and K as between K and R. P is lighter than both M and O. R is not lighter than K. The one who go to the gym last is heavier than O but lighter than S.

38. Who among the following go to gym on 17th April?
(a) K (b) M (c) S
(d) R (e) None of these

39. How many persons go to gym between R and S?
(a) None (b) One (c) Two
(d) Three (e) More than three

40. How many persons are heavier than R?
(a) None (b) One (c) Two
(d) Three (e) More than three

41. Who among the following go to gym immediately after K?
(a) P (b) M (c) N
(d) O (e) Q

Directions (42-44): Study the information carefully wers the questions given below.
α me either hour hand or minute hand is at **8**
∞ me either hour hand or minute hand is at **11**
® me either hour hand or minute hand is at **6**
£ me either hour hand or minute hand is at **9**
Å me either hour hand or minute hand is at **2**
µ me either hour hand or minute hand is at **5**
Note: if two symbols are given than by default second symbol is consider as minute hand and first symbol is considered as hour hand. And all time are considered at pm.

42. If a man leaves from GIP to WOW at **®Å**. Usually he takes 20 min to reach WOW, but that time he reaches 15 min later, then at what time he will reach WOW?
(a) **∞®** (b) **®∞** (c) **®£**
(d) **®®** (e) None of these

43. A person takes 40 minutes to reach airport from his office and he has to catch airplane that is scheduled to depart at '**£µ**' so at what time should he leave from his office for the airport to arrive at the airport at 20 minutes earlier?
(a) **µÅ** (b) **®∞** (c) **Åµ**
(d) **αµ** (e) None of these

44. If a man leaves from his home to office at '**£∞**' and he takes 2hr to reach his office, at what time he will reach to office?
(a) **µ£** (b) **∞Å**
(c) **∞∞** (d) Can't be determined
(e) None of these

Directions (45-48): Study the following information carefully and wer the questions given below:
Ten vehicles are placed in two parallel rows, five vehicles in row 1 facing north and rest in row 2 facing south having equal distance between each other i.e. each of them faces another vehicle.

These vehicles are placed according to speed which increases from West to East direction in both rows but not necessarily in the given order. Two vehicles are placed between boat and the vehicle with speed 170 km/h. Car is placed just next to the vehicle which faces Truck. Only one vehicle is placed between Car and cycle. Scooter is just next to the vehicle with speed 120 km/h, but none of them is placed at extreme end of the row. All the vehicle with speed less than 50 km/h faces South. Aeroplane is placed next to vehicle with speed 228 km/h.

cycle (12 km/h),
Auto rickshaw(22 km/h),
boat(54 km/h),
scooter (72 km/h),
motorcycle (120 km/h),
Car (154 km/h),
Truck (170 km/h),
Train (228 km/h),
Helicopter (274 km/h),
Aeroplane(290 km/h)

45. Which among the following vehicle is placed opposite to Motor Cycle?
(a) Auto rickshaw (b) Train
(c) Cycle (d) Car
(e) Cannot be determined

46. What is the speed of the vehicle which is placed at extreme left end of row 1?
(a) 54 km/h (b) 12km/h
(c) 290 km/h (d) 274 km/h
(e) 22 km/h

47. Which vehicle is placed at extreme left end of row 2?
(a) Train (b) cycle (c) Helicopter
(d) Aeroplane (e) Scooter

48. What is the speed range of the vehicle which is placed exactly between Car and Aeroplane?
(a) (125-160) km/h
(b) (160-200) km/h
(c) (200-250) km/h
(d) (250-275) km/h
(e) None of these

Directions (49): Each question given below consists of a statement, followed by two arguments numbered I and II. You have to decide which of the arguments is a 'strong' argument and which is a 'weak' argument. Give wer-
(a) If only argument I is strong
(b) If only argument II is strong
(c) If either I or II is strong
(d) If neither I nor II is strong
(e) If both I and II are strong

49. Statement: Should all the unauthorized structures in the city be demolished?
Arguments:
I. No. Where will the people residing in such houses live?
II. Yes. This will give a clear message to general public and they will refrain from constructing unauthorized buildings.

Directions (50): In question below is given a statement followed by two assumptions numbered I and II. An assumption is something supposed or taken for granted. You have to consider the statement and the following assumptions and decide which of the assumptions is implicit in the statement.
Give wer-
(a) If only assumption I is implicit
(b) If only assumption II is implicit
(c) If either I or II is implicit
(d) If neither I nor II is implicit
(e) If both I and II are implicit

50. Statement: "I would like to study the impact of pay revision on job satisfaction of employees." — A tells B.
Assumptions:
I. Job satisfaction can be measured.
II. A has necessary competence to undertake such study.

QUANTITATIVE APTITUDE

Directions (51-56): - Rahul goes to gym and runs 40 minutes on treadmill. For starting 15 minutes he runs at a uniform speed of 5 km/hr and after that he runs at a uniform speed of 9km/hr for remaining time. He runs total **(A)** km on treadmill. After that he comes to his house and get ready for office which is 45km away from his house. He reaches office in 1.5 hours at 9:30 a.m.
In office he gives some work to his subordinates P_1 and P_2 at **(B).** P_1 can complete that work in 6 hours while efficiency of P_1 and P_2 is in the ratio 5 : 4. P_1 and P_2 together completes 75% of that work at 12:30 p.m. Rahul and P_2 together can complete same work in 3 hours. Rahul is **(C)%** more efficient than P_1. After that work he comes back to home in upstream (Speed of stream is 3km/hr and his speed in still water and distance between his house and office are same as earlier). He takes **(D)** hours to reach home.
When he reaches home, two of his friends Aman and Raman come at his house. All three starts to play a game in which 2 dices are used by each person. **(E)** is the number of outcomes in which first Rahul and then Aman throw their respective dices. In a game, all three throw their dices

and each one of them get 8 as the sum of numbers in their dices and any one of two not get same outcomes. Winner is the one who gets highest number as the sum of the square of the number comes in dices. **(F)** should be the outcomes of the dices of Raman if Raman is winner of the game.

51. What value will come at the place of **'A'?**
(a) 4.25 km (b) 3.75 km (c) 5 km
(d) 5.25 km (e) None of the given options

52. What value will come at the place of **'B'?**
(a) 10:45 a.m. (b) None of the given options
(c) 11 a.m. (d) 10:30 a.m.
(e) 10 a.m.

53. What value will come at the place of **'C'?**
(a) $16\frac{2}{3}\%$ (b) 20% (c) 25%
(d) $33\frac{1}{3}\%$ (e) 50%

54. What value will come at the place of **'D'?**
(a) 2 hours (b) 1.5 hours (c) $1\frac{7}{8} hours$
(d) $1\frac{2}{3} hours$ (e) $1\frac{4}{11} hours$

55. What value will come at the place of **'E'?**
(a) 72 (b) 42 (c) 36
(d) 108 (e) 54

56. What value will come at the place of **'F'?**
(a) None of the given options
(b) Cannot be determined
(c) 3 and 5
(d) 4 and 4
(e) 2 and 6

57. If length of a rectangle is decreased by 6 cm we get a square and the area of square formed is 252 cm^2 less than the area of square formed when breadth of the original rectangle is increased by 6 cm. Find the perimeter of the rectangle.
(a) 42 cm (b) 88 cm (c) 80 cm
(d) 84 cm (e) 72 cm

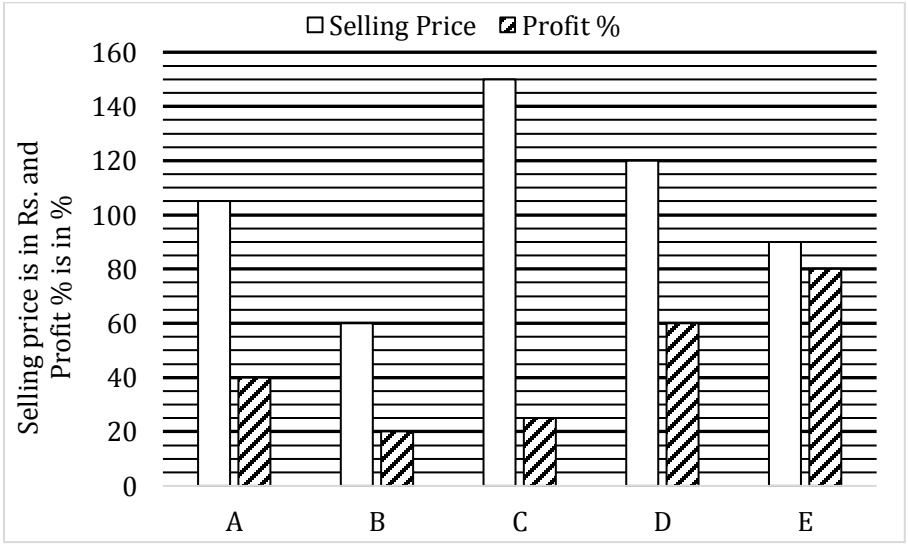
58. Breadth of a rectangle is equal to the diagonal of the square whose side is $2.5\sqrt{2}$ cm. Ratio between length and breadth of rectangle is 3 : 1. Find the area of the rectangle (in cm^2).
(a) 125 (b) 75 (c) 90
(d) 100 (e) 115

59. Equal distance is covered by a boat in upstream and in downstream in total 5 hours. Sum of speed of a boat in upstream and downstream is 40 km/hr. Speed of boat in still water is 600% more than the speed of stream. Find the approximate distance covered by boat in downstream (in km).
(a) 40 (b) 35 (c) 55
(d) 59 (e) 50

60. A and B entered into a partnership with Rs.800 and Rs.1600 respectively. From 9^{th} months on-ward they each decided to invest Rs.100 more on starting of each month. If total annual profit is Rs.7700 then find the profit share of A.
(a) Rs.2650 (b) Rs.3250 (c) Rs.4250
(d) Rs.2350 (e) Rs.1650

61. A starts a business, after 6 months B also join him with Rs.4500 and after 2 months of B's joining C also join them with Rs.4500. If A gets approx Rs 4900 out of total annual profit of Rs.10,000 then find the approximate value of initial investment of A.
(a) Rs.4800 (b) Rs.4200 (c) Rs.3600
(d) Rs.4400 (e) Rs.5200

Directions (62-66): - Bar chart given below shows selling price of five articles and profit % earned on selling these articles by Ravi. Study the data carefully & wer the following questions.



62. Ravi sold article 'D' to Shyam who again sold it at 25% profit. Find the difference between profit earned by Ravi to profit earned by Shyam.
(a) Rs. 5 (b) Rs. 10 (c) Rs. 15
(d) Rs. 20 (e) Rs. 25

63. Cost price of article 'A' is what percent more/less then cost price of article 'C'.
(a) 62.5% (b) 37.5% (c) 25%
(d) 75% (e) 50%

64. Ravi marked article B, 50% above its cost price, then what percent discount should be given on marked price to earn the given profit?
(a) 40% (b) 30% (c) 25%
(d) 20% (e) 10%

65. Profit earned on selling article 'E' is how much more/less than profit earned on selling article 'C'.
(a) Rs.40
(b) None of the given options
(c) Rs.30
(d) Rs.20
(e) Rs.10

66. Ravi mark-up article 'A' such that on selling article 'A' at 16% discount he will earn the given profit. Mark up price of article 'A' is what percent more than its cost price?
(a) $33\frac{1}{3}\%$ (b) $66\frac{2}{3}\%$ (c) $16\frac{2}{3}\%$
(d) $26\frac{2}{3}\%$ (e) $73\frac{1}{3}\%$

Direction (67-70): - Two quantities that is I and II are given in following questions. Students is expected to solve the quantities and wer them according to given options by comparing their numerical values.

67. $3^{x+5}.9^{2x-4} = 9^{5x-14}$
And, $2y^2 - 15y - 28 = 3y^2 - 23y - 13$
Quantity I: - Value of 'x'
Quantity II: - Value of 'y'
(a) Quantity I > Quantity II
(b) Quantity I < Quantity II
(c) Quantity I ≥ Quantity II
(d) Quantity I ≤ Quantity II
(e) Quantity I = Quantity II or No relation

68. Quantity I: When an article sold at 28% discount then profit earned is 29.6%. 'x' is the profit % when article sold at 30% discount.
Quantity II: 38
(a) Quantity I = Quantity II or No relation
(b) Quantity I < Quantity II
(c) Quantity I ≤ Quantity II
(d) Quantity I ≥ Quantity II
(e) Quantity I > Quantity II

69. 12 men can complete a work in 10 days. 18 women can do the same work in 20 days. 27 children can do that work in 20 days. 9 women and 9 children together do that work for 16 days.
Quantity I: No. of men required to complete the remaining work in one day
Quantity II: 36
(a) Quantity I > Quantity II
(b) Quantity I ≤ Quantity II
(c) Quantity I = Quantity II or No relation
(d) Quantity I < Quantity II
(e) Quantity I ≥ Quantity II

70. Quantity I: Time taken to fill the tank when A, B and C are opened in every alternate minute starting with A and ending with C. A, B and C alone takes 20 minutes, 15 minutes and 12 minutes respectively to fill the tank.
Quantity II: Find the time taken by waste pipe to empty the full cistern. Two pipes alone can fill a cistern in 10 minutes and 15 minutes respectively. When these two pipes along with the waste pipe are opened, the cistern gets filled in 18 minutes.
(a) Quantity I > Quantity II
(b) Quantity I < Quantity II
(c) Quantity I ≥ Quantity II
(d) Quantity I ≤ Quantity II
(e) Quantity I = Quantity II or No relation

Directions (71-75): - Data given below shows number of units of electricity consumed by F, Lights and Other appliances in three different houses. Study the data carefully and wer the following questions.
House A → Total number of units consumed in House 'A' is 250 units out of which 120 units are consumed by Other appliances. Units consumed by F is 30 less than Units consumed by Lights.
House B → Units consumed by Lights in House 'A' and House 'B' is same. Units consumed by F in House 'B' are 60% more than that of f in House 'A'.
House C → Total units consumed by Lights in all three houses is 200 units and units consumed by F and Lights is same in House C. Units consumed by Other appliances is 125% more than that by F in this House. Total units consumed by Other appliances in all three houses is 320 units.

71. Number of units consumed by Lights in House 'B' is what percent more of the units consumed by Lights in house 'C'?
(a) 100% (b) 200% (c) 120%
(d) 50% (e) 150%

72. Average number of units consumed by Other appliances in House 'B', 'C' and 'D' is 110 units. Find the units consumed by Other appliances in House 'D'?
(a) 110 units (b) None of the given options
(c) 130 units (d) 120 units
(e) 140 units

73. Find total number of units consumed in House 'A' and 'C' together?
(a) None of the given options
(b) 410 units
(c) 430 units
(d) 400 units
(e) 420 units

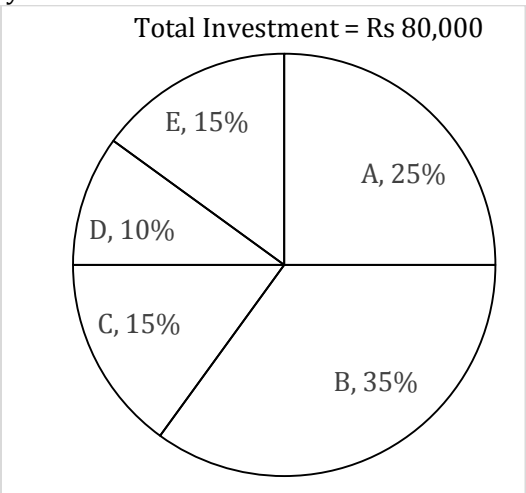
74. Find the difference between Units consumed by Other appliances in House 'B' and house 'C'?
(a) 10 units
(b) 20 units
(c) 30 units
(d) None of the given options
(e) 40 units

75. Total units consumed by F and Lights together in House 'C' is what percent less than total units consumed by Lights and Other appliances together in House 'A'?
(a) 20% (b) 40% (c) 50%
(d) 60% (e) 80%

76. Cost price of a pen is 50 Rs. and that of notebook is 140 Rs. If pen is sold at 200% profit, then to purchase 10 such note books how many pens are required to sell if only profit money is used to buy notebooks?
(a) 16 (b) 18 (c) 14
(d) 20 (e) 22

77. Length of two trains are 150 m and 200 m respectively and the ratio (shorter: longer) of their speed is 2 : 5. If they cross each other in opposite direction in 15 second then in what time faster train will overtake the slower train.
(a) 20 seconds (b) 25 seconds
(c) 32 seconds (d) 35 seconds
(e) 27 seconds

Directions (78-80): Pie-chart given below shows investment (in terms of percentage) out of total investment of five different persons. Study the questions carefully and wer them.



78. B and E started a business together. B left the business 9 months after starting of business. Find the difference between profit shares of B and E if total annual profit is Rs. 15,400?
(a) Rs.2100 (b) Rs.4200 (c) Rs.1400
(d) Rs.2800 (e) Rs.3500

79. A and D started a business together after 6 months 'A' is replaced by 'C'. D left the business after 2 months of 'A' while 'C' worked for total 'x' months. Out of total profit of Rs 13,050, 'A' got Rs 6750, then find the value of 'x'.
(a) 10 (b) 8 (c) 6
(d) 4 (e) 2

80. 'A', 'F' and 'C' started a business together. F invested Rs. 4000 more than amount invested by C. F left the business after 6 months of starting of business. After 2 months more, 'C' left the business. Out of annual profit if A and C together got Rs 8750 then find total annual profit got by all three together?
(a) Rs 11,250 (b) Rs 10,000
(c) Rs 12,500 (d) Rs 13,750
(e) Rs 15,000

Directions (81-85): Solve the given quadratic equations and mark the correct option based on your wer—

81. I. $(x - 2)^2 = 9$
II. $(2y + 8)^2 = 16$
(a) $x < y$
(b) No relation can be established between x and y.
(c) $x > y$
(d) $x \leq y$
(e) $x \geq y$

82. I. $x^2 - 16x + 64 = 0$
II. $y^2 - 16y + 63 = 0$
(a) $x > y$
(b) $x \leq y$
(c) $x \geq y$
(d) $x < y$
(e) No relation can be established between x and y.

83. I. $\frac{25}{x^2} - \frac{15}{x} + 2 = 0$
II. $\frac{40}{y^2} + 1 = \frac{13}{y}$
(a) $x < y$
(b) $x \geq y$
(c) No relation can be established between x and y.
(d) $x \leq y$
(e) $x > y$

84. I. $\frac{48}{x^2} - \frac{14}{x} + 1 = 0$
II. $\frac{45}{y^2} + \frac{1}{y} = 2$
(a) No relation can be established between x and y.
(b) $x \leq y$ (c) $x < y$
(d) $x > y$ (e) $x \geq y$

85. I. $x^2 + 3x - 4 = 0$
II. $y^2 + 10y + 24 = 0$
(a) $x \leq y$
(b) $x < y$
(c) $x > y$
(d) No relation can be established between x and y.
(e) $x \geq y$

Directions (86-90): The following questions are accompanied by three statements (I), (II), and (III). You have to determine which statement(s) is/are sufficient /necessary to wer the questions

86. What is distance between A and B ?
I. Two persons Amit and Abhi started simultaneously from A to B with their speed in ratio 4 : 5.
II. Abhi reached reached B one hour earlier than Amit.
III. Difference between speed of Amit and Abhi is 20 km/hr.
(a) Only I and II.
(b) Only II and III
(c) All I, II and III
(d) Cannot be wered even including all three statement
(e) None of these

87. What is the area of rectangle ?
I. If ratio of length and breadth of the rectangle is 3 : 2.
II. Circumference of a circle is 440 m and breadth of rectangle is 1/7 th of radius of the circle.
III. If length is 50% more than breadth.
(a) Only III
(b) Only II and either I or III.
(c) Only II
(d) All I, II and III
(e) None of these

88. How many students failed in class 11th ?
I. 400 Students passed in class 11th.
II. No. of students failed in class 11th is 20% of those failed in class 12th.
III. Ratio of student appeared to that of failed in class 11th is 5 : 3.
(a) Only I and III
(b) Only II
(c) Only I and II
(d) All I, II and III
(e) Cannot be obtained even including all three statement

89. What is the rate of interest?
I. S.I. accrued in two years on an amount at same rate of interest is Rs. 44,000.
II. The amount after some years on S.I. is Rs. 154000.
III. Difference between the C.I. and S.I. earned in two years on the same amount and at the same rate of interest is Rs. 120.
(a) Only I and III
(b) Only III
(c) Only II and III
(d) Cannot be wered even including all statement
(e) None of these

90. What is the sum of two number?
I. The bigger no. is 6 more than the smaller no.
II. 40% of smaller no. is equal to 30% of bigger no.
III. The ratio b/w half of the bigger no. & one-third of smaller no. is 2 : 1.
(a) Only II & III
(b) Only I & II
(c) Any two of the three statements
(d) All statement is required
(e) Only I & either II or III

91. A container contains 165 liters of milk. Some quantity of milk is taken out and half of that quantity of milk, water is added in the container. Now ratio of milk to water in the container becomes 5:3. What is the quantity of water added in it?
(a) 40 lit (b) 45 lit (c) 60 lit
(d) 30 lit (e) 90 lit

92. Two boxes contain 4 and 16 balls respectively. Two balls in the first box and four in the second, are black. If a box is chosen randomly and two balls are drawn at random from it, what is the probability that at least one ball is black if the ball is not replaced?
(a) $\frac{11}{20}$ (b) $\frac{43}{120}$ (c) $\frac{77}{120}$
(d) $\frac{9}{20}$ (e) None of these

93. Train A, travelling at 84 kmph, overtook train B, traveling in the same direction, in 10 seconds. If train B had been traveling at twice its speed, then train A would have taken 22.5 seconds to overtake it. Find the length of train B, given that it is half the length of train A.
(a) 50 m (b) 100 m (c) 200 m
(d) 150 m (e) None of these

94. A solid sphere of radius 6 cm is melted and re-casted into a hollow cylinder of uniform thickness. If the external radius of the base of the cylinder is 5 cm and its height is 32 cm, find the uniform thickness of the cylinder ?
(a) 3 cm (b) 1.5 cm (c) 1 cm
(d) 2.5 cm (e) None of these

95. X and Y entered into partnership with Rs. 700 and Rs. 600 respectively. After another 3 months, X withdrew two-sevenths of his stock but after 3 months, he puts back three-fifths of what he had withdrawn. The total profit at the end of the year is Rs. 726. How much of this should X receive?

(a) Rs. 336 (b) Rs. 366 (c) Rs. 633
(d) Rs. 663 (e) None of these

Direction (96-100): - Table given below shows percentage of men out of total men who worked on odd days in three different months and rest of the men are working on even days of the respective month. Study the table carefully and wer the following questions.

Months	Total Number of Men worked	Percentage of men worked on odd number days
March	1000	30%
April	1500	20%
August	750	60%

Note: Each man works for 8 hours per day
Total man-hours = Total man worked × Total day of work × 8 hours

96. Total man-hours on odd days of march is what % of the total man-hours on even days of April?
(a) $26\frac{2}{3}\%$ (b) $18\frac{2}{3}\%$ (c) $33\frac{1}{3}\%$
(d) $16\frac{2}{3}\%$ (e) $58\frac{1}{3}\%$

97. Total man hour of April is how much more or less than the total man hour of August?
(a) 80,000 (b) 83,200 (c) 84,800
(d) 86,400 (e) 88,000

98. Find the ratio between man-hour on even days of march to man hour on even days of August?
(a) 6 : 1 (b) 7 : 3 (c) 8 : 3
(d) 3 : 7 (e) 9 : 2

99. Man-hour on odd days of April is how much % less than the man hour on odd days of August?
(a) $33\frac{1}{3}\%$ (b) 40% (c) 37.5%
(d) 62.5% (e) 60%

100. What is the average of man hours on even days of all three months together.
(a) 88,000 (b) 66,000 (c) 86,000
(d) 78,000 (e) 74,000

ENGLISH LANGUAGE

Directions (101-105): In each of the following questions given below, a sentence is given with some bold words which may contain errors. Below each of the sentence, a table is given with two columns in which column 'A' contains the list of bold words, and in column 'B' the suggested corrections are listed. You have to choose the best alternate among the four given options. If no correction is required against the given bold words, mark (e) .i.e. "None of the above" as your answer.

101. The Indian telecom sector has witnessed a **Paranoid** shift—crossing the billion-user mark and **rolling** out new technologies along with other leading markets. Just four years ago, it **faced** multiple challenges—falling revenues and increasing debt were wreaking **triumph.**
COLOUMN A
(1) Paranoid (2) Rolling
(3) Faced (4) Triumph
COLOUMN B
(5) Paradigm (6) Rolled
(7) Face off (8) Havoc
(a) Both (1) - (5) and (4) – (8)
(b) (2) – (6)
(c) (1) – (5)
(d) (3-7)
(e) None of the above

102. The government launched Tarang Sanchar portal to correct **mislead** around electromagnetic **emissions** from towers. It allows people to check emission (EMF) **consensus** status of mobile towers, giving **information** about any site, on request, via email.
COLOUMN A
(1) Mislead (2) Emissions
(3) Consensus (4) Information
COLOUMN B
(5) Misconceptions (6) Eminences
(7) Compliance (8) Informed
(a) (4) – (8) (b) (2) – (6)
(c) (1) – (5) (d) Both (1) - (5) and (3-7)
(e) None of the above

103. India has told messaging platform WhatsApp to get serious about **hawking** the purveyors of fake news and **variance** rumours. In a meeting with one of its top **hosts**, the law minister **stressed** that over 20 lives had been lost in India due to this rumour-mongering.
COLOUMN A
(1) Hawking (2) Variance
(3) Hosts (4) Stressed
COLOUMN B
(5) Tracking (6) Vicious
(7) Honchos (8) Guessed
(a) (4) – (8) (b) (2) – (6)
(c) (1) – (5)
(d) (1) - (5), (2) – (6) and (3-7)
(e) None of the above

104. **Preserving**, changing social structures, **raising** disposable incomes, industrial growth and infrastructure expansion, **coupled** with the easy availability of housing loans, are the drivers of decorative paints industry, which accounts for 75% of the **estimated** $8.2-billion Indian market.

COLOUMN A
(1) Preserving (2) Raising
(3) Coupled (4) Estimated
COLOUMN B
(5) Urbanisation (6) Rising
(7) Caused (8) Estimation
(a) (4) – (8)
(b) (2) – (6)
(c) Both (1) - (5) and (2) – (6)
(d) (1) - (5), (2) – (6) and (3-7)
(e) None of the above

105. It is important to measure the **outstanding** risk of a company and find the best possible solution to **hedge** and manage it. **Had** locked in a major portion of the costs can give paint manufacturers a significant margin boost to achieve **compete** pricing and hence healthy functioning.
COLOUMN A
(1) Outstanding (2) Hedge
(3) Had (4) Compete
COLOUMN B
(5) Outdated (6) Wedge
(7) Having (8) Competitive
(a) (4) – (8)
(b) (2) – (6)
(c) Both (3) - (7) and (4) – (8)
(d) (1) - (5), (2) – (6) and (3-7)
(e) None of the above

Directions (106-112): Read the following passage carefully and answer the questions given below it. Certain words are printed in bold to help you locate them while answering some of the questions.

The legal position of beggars in India has always been precarious. The Bombay Prevention of Begging Act (BPBA), 1959, which has held sway for decades, rests on the premise that poverty equals criminality. This allows the state to arrest people without a warrant on nothing more than a "suspicion," and put them out of the public gaze. Invariably, police raids to round up "beggars" and force them out of city limits are part of projects to "clean up" cities. India's image, especially for the foreigner's gaze, takes precedence over the plight of the banished. The Delhi High Court, earlier this month, has rectified this by conceding that begging is a structural problem. It argued that it is unfair of the state to add insult to injury and punish people for its own failures. **The court quashed those provisions of the BPBA that make begging a punishable offence.** However, its ruling is applicable only to Delhi.

The people targeted by the anti-begging laws are not in anyone's "constituency" given their social and economic deprivation. Under the act, beggars, peddlers, small-time hawkers, street performers, rag pickers, and "loiterers" (including migrants), can be arrested without a warrant or let off on a bond or detained in a certified institution for two to three years and, on a second conviction, for 10 years. This was true in regard to the BPBA, which also asked for the detention of the dependents of the beggars. Effectively, this posits the beggar as a legal outsider: inhabiting the same territorial space that is India, but disenfranchised from the benefits of Indian citizenship that guarantees constitutional rights. Implied in this is the state's stance that the rights that come with citizenship have to be bought with forms of privilege that lend a perception of legitimacy and "respectability" to the individual. It is enough for a person to "look like a beggar" in order to be arrested. The beggar homes are understaffed and face a severe paucity of resources; and the inmates are treated like free labor. Theoretically, the inmates are supposed to receive vocational training, but practically they come back to the same desperate situation.

In 1990, following a petition before the Bombay High Court, the court ordered a committee to present its report. The committee pointed out that there is no criteria to decide who is a beggar, who is sick, physically handicapped, or simply in need of economic help. In these raids, even those not begging but found in dirty clothes and wandering were arrested arbitrarily. Transgender persons, for example, are particularly vulnerable. Such a vast amount of unchecked power over certain sections of the marginalized population by means of this law gives the state machinery yet another tool to perpetuate entrenched societal biases against already vulnerable groups. Within the purview of what qualifies as "begging" come a wide variety of people who suffer from various kinds of—and often overlapping—marginalization. The suggestions made by the committee are predictably gathering dust.

The recent ruling by the Delhi High Court has maintained the provisions in the act that penalize those employing or causing persons to solicit or receive alms. It has also called upon the city administration to curb any racket of forced begging after examining the sociological and economic aspects of the matter. It must be noted here that the criminal begging ring racketeers are hardly the ones who are arrested in the raids. While these persons invariably escape the law, the sentence they receive upon conviction (if at all) is three years. It has been proved that the provisions of the act go against Articles 19(1) (a) and 21 of the Constitution and the state's duty to promote the welfare of the disabled and unemployed. Destitution is widely considered to be a product of the processes of a country's political economy. In the absence of immediate structural improvement, the least the state governments in India can do is decriminalize begging. The Delhi High Court's judgment accepts that there is a problem. The solution is staring us in the face.

106. What are the pronouncements that allows State to arrest beggars without a warrant?
(a) The beggar homes are understaffed and face a severe paucity of resources.
(b) They are socially and economically deprived.
(c) Applicability of evidences against the crime committed by those people.
(d) BPBA Act which rests on the postulation that poverty equals criminality.
(e) All of these.

107. Regardless of Delhi High Court's disapproval of the provisions of BPBA, how is the decision still not beneficial?
(a) As the court first ordered a committee to present its report, and then take the decision.
(b) As BPBA hasn't acted accordingly its decision of begging not being a punishable offence.
(c) The ruling is applicable only to Delhi.
(d) Both (a) and (b).
(e) Both (b) and (c).

108. According to the passage, what does postulating beggars as legal outsider mean?
(a) Relocation them including peddlers, small-time hawkers, street performers, rag pickers.
(b) Depriving them of the benefits of Indian citizenship that guarantees constitutional rights.
(c) Liberation of the dependents of the beggars.
(d) Treatment of inmates of beggars as free labor.
(e) None of these.

109. Which were the vulnerable groups which were targeted on the basis of societal biases?
(a) All of the physically challenged people.
(b) People found in rags and filthy clothes and wandering.
(c) Transgender groups.
(d) Both (b) and (c).
(e) All of these.

110. Which of the statement is definitely false according to the passage?
(a) The inmates are supposed to receive a vocational training but instead they do not.
(b) The criminal begging ring racketeers are always the ones who are arrested in the raids.
(c) Poverty is widely considered to be a product of the processes of a country's political economy.
(d) Transgender people are most vulnerable to the raids on the basis of societal biases.
(e) India's image, especially for the foreigner's gaze, takes precedence over the plight of the banished.

111. What is(are) the step(s) mentioned in the passage as one of the minor steps in favor of beggars?
(a) Prevention of the detention of the dependents of the beggars.
(b) State governments in India can legitimize begging.
(c) Disenfranchised beggars gain the Indian Citizenship.
(d) Inhabiting the territorial space that is India.
(e) All of these.

112. Given below is a sentence from the passage that may or may not be grammatically viable, choose the most suitable alternative that reflects the grammatically correct sentence. If the highlighted sentence does not require any corrections, choose option (e), i.e. "no correction required" as your answer choice.

Sentence (A): "*The court quashed this provisions of the BPBA that made begging a punishable offence*."
(a) The court quashed those provision of the BPBA that made begging a punishable offence.
(b) The court quashes this provision of the BPBA that make begging a punishable offence.
(c) The court quashes those provisions of the BPBA that makes begging a punishable offence.
(d) The court quashed those provisions of the BPBA that make begging a punishable offence.
(e) No correction required

Directions (113-114): Each of the following questions has a paragraph from which one sentence has been deleted. From the given options, choose the one that completes the paragraph in the most appropriate/coherent way.

113. While one can rightfully say that success stories of women achievers are not a phenomenon new to our culture, women have become the fulcrum of administrative initiatives in the four and a half years of the Narendra Modi led government. When, from the ramparts of Red Fort, the PM declared his government's intention _____ across the nation, many did not bat an eyelid. Since gigantic political announcements were the norm in the nation's capital, this seemed like the most non-glamorous proclamation by a head of state. However, studies have shown that when sanitation needs of young female students are met, dropout rates amongst girl students can be effectively curtailed.
(a) to travel long distances for facilities in households with toilets
(b) Is not to be adjudged as a vote bank, for no school going girl child was a voter
(c) to be the harbinger of wisdom and education in the form of Saraswati, anointed by the Gods
(d) to ensure toilets are separately built for girls in government schools
(e) None of these

114. The Election Commission of India (ECI) holds that paid news "plays a very vitiating role in the context of free and fair elections and involves under-reporting of election expenses" by candidates. It found 42 cases of paid news in the election of BJP's Narottam Mishra from Datia, Madhya Pradesh (MP), in the 2008 state Assembly elections. Indeed, one particular news item with the same headline and body appeared in three leading Hindi news Delhi immediately before the polls. _____. Given there is no specific law against "paid news", the poll panel leant on Section 10A of the Representation of Peoples Act (RPA) that deals with the misreporting of funds, arguing that Mishra knew of, and by implication authorised the publication of the "reports" which should be seen as political advertising under Section 77 of the RPA.

(a) This essentially restricts the poll regulator from acting against paid news.
(b) In 2017, the ECI ordered Mishra's disqualification and barred him from contesting elections for three years.
(c) Since the expenditure incurred or authorised on this head was not listed in the submissions to the poll regulator.
(d) A Law Commission report from 2015 also recommends amending the RPA to this effect.
(e) None of these

115. In the question given below three sentences are given which are jumbled. Find the correct sequence of these sentence so that they form a meaningful paragraph.
A. This asymmetry is typified by Article 370 — a provision, as Ms. Tillin writes, which was debated for over five months before forming part of the Constitution as adopted in 1950.
B. In its original form, Article 370 accorded to J&K a set of special privileges, including an exemption from constitutional provisions governing other States
C. India's Constitution, as the political scientist Louise Tillin has explained, establishes a form of asymmetric federalism, in which some States enjoy greater autonomy over governance than others.
(a) CBA (b) BCA (c) ABC
(d) CAB (e) BAC

Directions (116-120): In each of the questions given below, a paragraph is given which has some blanks and those blanks have to be filled with the same word out of five words given below it. You have to choose that same word as your answer and fill up the blanks with that appropriate word.

116. By the 12th century a _____ referred to as Tanka was introduced. Later on, the Indian Rupee was adopted as the country's sole _____, and the use of other domestic coinage was removed from circulation. Our _____ rankings show that the most popular India Rupee exchange rate is the USD to INR rate.
(a) Money (b) Currency (c) Worth
(d) Value (e) Rupees

117. _____ education debt is a big issue in health care. _____ schools themselves are addressing the student debt problem. However, there is an array of government programs that help students afford _____ school or that forgive student lo
(a) Business (b) Economics (c) Science
(d) Law (e) Medical

118. The largest chunk of the _____ population is made of daily wage earners, not farmers, the report said, adding that an equal focus on both _____ wages and farm income is vital to relieve _____ distress.
(a) Poor (b) Rural (c) Agricultural
(d) Advanced (e) Insolvent

119. The much-anticipated New Industrial _____, which will replace the 27-year-old existing _____ and pave the way for promotion of new technology and reduced regulations, has been placed before the Union Cabinet for approval. This will be the third industrial _____ drafted in independent India.
(a) Policy (b) Procedures
(c) Meeting (d) Practices
(e) Group

120. Lead with the _____ of one individual who works there and what it took for her to get that job and how that job has made her life better. It was a _____, not topic, about a high-powered woman who had persevered and triumphed. More importantly, it was a _____ I wanted to read and knew other readers would too.
(a) Autobiography (b) Record / Reports
(c) Fiction (d) Article
(e) Story

Directions (121-125): In each of the questions given below, a passage has been given which are either situational based or describes a scenario. Below each passage, a question has been given which is framed to make you to infer something out of it. Mark out the correct inference as your answer.

121. Finding the efforts by Internet giants to curb circulation of online videos of sexual violence against women and children inadequate, the government is likely to seek "stricter directions" to service providers, such as Facebook and YouTube, from the Supreme Court.
What is the attitude of the government toward the social networking sites?
(a) Acrimonious (b) Acerbic
(c) Rigorous (d) Sardonic
(e) Sarcastic

122. The government is keen on intermediaries sharing certain data with law enforcement agencies to identify the origin of 'sexually violent' content. The issue of tracing the origin of "unlawful" content is already a bone of contention between the government and WhatsApp, which was recently pulled up by the Centre after being misused to spread fake news. What can be said about the attitude of the WhatsApp toward making the origin of a (unlawful) content on WhatsApp accessible to the law-enforcement agencies?
(a) Insidious (b) Exuberant (c) Fanatical
(d) Reluctant (e) Vehement

123. The Kerala government on Thursday claimed in the Supreme Court that sudden releases of water from the Mullaperiyar dam was a cause for the floods in the State. In an affidavit, Kerala slammed Tamil Nadu for allegedly ignoring its repeated entreaties for controlled release of water from the reservoir to facilitate the evacuation of thousands living downstream.
What is the attitude of the state government of Kerala towards the state government of Tamil Nadu?
(a) Censuring (b) Praising (c) Insidious
(d) Pernicious (e) Forbiddingly

124. Periodical warnings were issued since the water level reached 136 ft for every two feet rise, and from 140 onward for every one-foot rise. Intimation was given to the Kerala government well in advance regarding the release of water from the spillway of the dam, the counter-affidavit said.
"The allegation that action was taken by the Respondent State (Tamil Nadu) only after the water level in the dam crossed the permitted storage of +142 ft, is denied," Tamil Nadu said in its affidavit.
What is the tone of the statements made by the state of Tamil Nadu in its affidavit?
(a) Sarcastic (b) Sardonic (c) Enthusiastic
(d) Bitterly (e) Acerbic

125. In the first order on July 4, the court declared all animals as legal persons, effectively blurring the line that separates humans from other animals. Instead of blurring the line between man and animal, it would make more sense for the judiciary to ask the government to bolster laws like the Wildlife Protection Act, 1972, and the Prevention of Cruelty to Animals Act, 1960. Moreover, the order should have recognized that the animals had more value than just property under law even if they were not defined as persons. Such an order is more likely to have a lasting impact on animal welfare than an order declaring all animals to be persons.
(a) Animal welfare is difficult to be advanced through High Court's order.
(b) The court's order will effectively protect the animals from the inhumanity.
(c) Implementation of Wildlife Protection Act, 1972, and the Prevention of Cruelty to Animals Act, 1960 were a failure.
(d) There is a need to convert animals into human entities to treat them with respect.
(e) None of these

Directions (126-130): In each of the questions below, there is a word given in bold which is followed by five options. In each of the options, a pair of words is given which is either the pair of synonyms or antonyms or synonym & antonym of the word given in bold. Choose that pair as your answer.

126. ABERRANT
(a) Inane: Systematic (b) Anomalous: Amulet
(c) Abusive: Amoral (d) Abstain: Abandon
(e) Deviant: Abnormal

127. METICULOUS
(a) Conscientious: Nemesis
(b) Scrupulous: Slapdash
(c) Obligatory: Scrutinize
(d) Skeptic: Stringent
(e) Sloppy: Subservient

128. ECCENTRIC
(a) Peculiar: Bizarre
(b) Altruistic: Magnanimous
(c) Autocratic: Bloated
(d) Capacious: Chaste
(e) Compress: Illegitimate

129. ECSTASY
(a) Illusion: Hallucination
(b) Effectual: Hilarity
(c) Euphoria: Garbled
(d) Rapture: Insouciance
(e) Fatuous: Erudite

130. IMPUNITY
(a) Livid: Morbid
(b) Dispensation: Nullify
(c) Incarceration: Captivity
(d) Salvation: Incongruous
(e) Kindred: Obsessive

Directions (131-133): In the following questions a part of a sentence is given in bold, it is then followed by four sentences which try to explain the meaning of the idiom/phrase given in bold. Choose the alternative from the four given below each question which explains the meaning of the phrase correctly without altering the meaning of the sentence given as question. If none of the sentence explains the meaning of the highlighted phrase, choose option (e) i.e., "none of these" as your answer choice.

131. I contemplate long and hard before I decide if I feel ready to tackle a new skill or if I prefer **to let sleeping dogs lie**.
(a) I scrutinize thoroughly before I choose if I am ready to pursue a new skill or if I prefer to ignore it to avoid even more difficult situation.
(b) I examine extensively before I determine, if I want to follow a new skill or if I choose to capture the hidden capabilities.
(c) I study very hard while establishing whether I feel qualified to adapt a new skill or if I am inexperienced to assimilate it.
(d) I forecast thoroughly before I decide that if I am ready to tackle a new skill or if I choose to let the dogs sleep.
(e) None of these

132. If you want to respond but feel like the **cat got your tongue**, I spoke with experts to create an unofficial, evolving script we could use when we face a variety of icky situations.

(a) If you want to respond but feel like you could clamor, I spoke with experts to create an unofficial, evolving script we could use when we face a variety of icky situations.
(b) If you want to respond but feel like the cat held your tongue, I spoke with experts to create an unofficial, evolving script we could use when we face a variety of icky situations.
(c) If you want to respond but feel like you could only mutter, I spoke with experts to create an unofficial, evolving script we could use when we face a variety of icky situations.
(d) If you want to respond but feel like you can't answer anything, I spoke with experts to create an unofficial, evolving script we could use when we face a variety of icky situations.
(e) None of these

133. President Paul Biya has been acting like a **cat on hot bricks** or better still a mother who returns from a long journey just to find her plates in disarray.

(a) President Paul Biya has been acting anxious like a mother who returns from a long journey just to find her plates in disarray.
(b) President Paul Biya has been acting poised as if a mother who returns from a long journey just to find her plates in disarray.
(c) President Paul Biya' mother is suppressed after returning from a long journey just to find her plates in disarray.
(d) President Paul Biya is a mother who returns from a long journey just to find her plates in disarray and is distressed about it.
(e) None of these

Directions (134-140): Read the following passage and answer the questions accordingly.

Business always starts and closes with customers and hence the customers must be treated as the King of the market. All the business enhancements, profit, status, image etc. of the organization depends on customers. Hence it is important for all the organizations to meet all the customers' expectations and identify that they are satisfied customer. Customer satisfaction is the measure of how the needs and responses are collaborated and delivered to excel customer expectation. It can only be attained if the customer has an overall good relationship with the supplier. In today's competitive business marketplace, customer satisfaction is an important performance exponent and basic differentiator of business strategies. Hence, the more is customer satisfaction; more is the business and the bonding with customer. Customer satisfaction is a part of customer's experience that exposes a supplier's behavior on customer's expectation. It also depends on how efficiently it is managed and how promptly services are provided. This satisfaction could be related to various business aspects like marketing, product manufacturing, engineering, quality of products and services, responses customer's problems and queries, completion of project, post delivery services, complaint management etc.

Customer's perception on supplier helps the customer choose among the supplier on basis of money value and how well the delivered products suit all the requirements. The supplier's services never diminishes after the delivery as customer seeks high values post marketing services which could help them use and customize the delivered product more efficiently. If he is satisfied with the post marketing services then there are good chances for supplier to retain the customers to enhance repeated purchases and make good business profits. It is necessarily required for an organization to interact and communicate with customers on a regular basis to increase customer satisfaction. In these interactions and communications it is required to learn and determine all individual customer needs and respond accordingly. **In case if the products are identical in competition markets, satisfaction provides high retention rates.** For example, shoppers and retailers are engaged with frequent shopping and credit cards to gain customer satisfaction, many high end retailers also provide membership cards and discount benefits on those cards so that the customer remain loyal to them.

Higher the satisfaction level, higher is the sentimental attachment of customers with the specific brand of product and also with the supplier. This helps in making a strong and healthy customer-supplier bonding. This bonding forces the customer to be tied up with that particular supplier and chances of defection very less. Hence customer satisfaction is very important panorama that every supplier should focus on to establish a renounced position in the global market and enhance business and profit. Every business unit emphasizes on spurting a long term relationship with customers to nurture its stability in today's blooming market. Customer's expectations are now not only limited to get best products and services, they also need a face-to-face business in which they want to receive exactly what they demand and in a quick time.

Customer Relationship Management is an upright concept or strategy to solidify relations with customers and at the same time reducing cost and enhancing productivity and profitability in business. An ideal CRM system is a centralized collection of all data sources under an organization and provides an atomistic real time vision of customer information. A CRM system is vast and significant, but it be can implemented for small business, as well as large enterprises also as the main goal is to assist the customers efficiently. Usually an organization consists of

various departments which predominantly have access to customer's information either directly or indirectly. A CRM system piles up this information centrally, examines it and then makes it addressable within all the departments. A CRM system is not only used to deal with the existing customers but is also useful in acquiring new customers. The process first starts with identifying a customer and maintaining all the corresponding details into the CRM system which is also called an 'Opportunity of Business'. The Sales and Field representatives then try getting business out of these customers by sophistically following up with them and converting them into a winning deal. Customer Relationship Management strategies have given a new outlook to all the suppliers and customers to keep the business going under an estimable relationship by fulfilling mutual needs of buying and selling.

134. How can overall customer satisfaction be attained?
(a) By diversifying the limits of the business.
(b) If the customer has an overall good relationship with the distributor.
(c) If the customer has an overall good relationship with the supplier.
(d) Both (b) and (c).
(e) Both (a) and (b).

135. What are the various business facets mentioned that relate to customer satisfaction?
(a)Quality of products and services.
(b)Product manufacturing and engineering.
(c)Marketing and management of complaints.
(d)Post delivery services.
(e)All of these.

136. Why does the supplier ensures customer retention?
(a) In order to find practical guidance.
(b) For acquiring other businesses and adjusting pricing.
(c) To enhance repeated purchases and make good business profits.
(d) For challenging the assumptions underlying the organization's strategy and value proposition.
(e) For implementing and evaluating cross-functional decisions.

137. What is one of the problems concerned with products that requires organizations to be in regular touch with customers?
(a) Short term revenue and profitability.
(b) Short time durability of products in markets.
(c) Uniformity of products in competing markets.
(d) As the product quality nowadays do not meet the customer needs.
(e) All of these.

138. How does a CRM system provides a real time vision of customer information?
(a) Through accurate forecasting which makes it good for aligning managements.
(b) By preventing outdated database and documents at any given moment.
(c) Both (a) and (b).
(d) By examining all the information centrally from all the data sources.
(e) None of these.

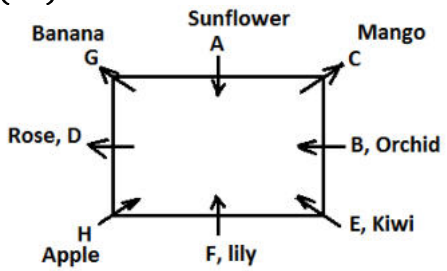
139. Which of the statement is definitely false according to the passage?
(a) Every business unit focuses on establishing long term relationship with customers.
(b) CRM is such a vast and significant system that it is basically used to deal with the existing customers.
(c) The supplier's services never diminish after the delivery as customer seeks high values post marketing services.
(d) An ideal CRM system is a centralized collection of all data sources under an organization
(e) None of these.

140. Given below is a sentence from the passage that may or may not be grammatically viable, choose the most suitable alternative that reflects the grammatically correct sentence. If the highlighted sentence does not require any corrections, choose option (e), i.e. "no correction required" as your answer choice.
Sentence (A): ***"In case if the products are identical in competition markets, satisfaction provides high retention rates."***
(a) Even if the products are identical in competing markets, satisfaction provides high retention rates.
(b) In case if the product is identical in competing markets, satisfaction provides high retention rates.
(c) In case if the products are identical at competing markets, satisfaction provide higher retention rates.
(d) Even if the products are identical in competition markets, satisfaction provides highest retention rates.
(e) No correction required

Solutions

REASONING ABILITY

Directions (1-5):



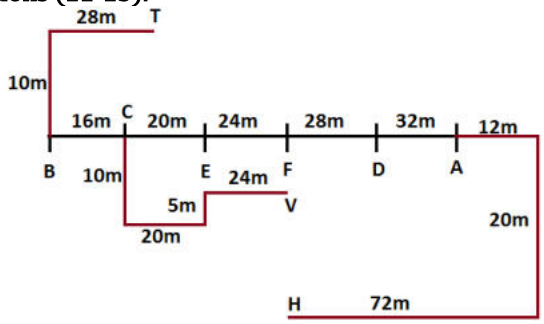
1. (d) 2. (a) 3. (c)
4. (b) 5. (e)

Directions (6-10): Logic: In the given Input-Output the numbers are arranged from both the ends simultaneously. In first step- Lowest number is arranged from the left end and highest number is arranged from the right end. In second step- 2nd lowest number is arranged from the left end and 2nd highest number is arranged from the right end and so on... Also while arranging the numbers, the numbers which are arranged from left end are replaced by the addition of the digits of that number whereas the numbers which are arranged from the right end are replaced by the difference of the digits of that number.

Input: 75 12 10 94 84 32 63 42 54 22
Step I: 01 75 12 84 32 63 42 54 22 05
Step II: 03 01 75 32 63 42 54 22 05 04
Step III: 04 03 01 32 63 42 54 05 04 02
Step IV: 05 04 03 01 42 54 05 04 02 03
Step V: 06 05 04 03 01 05 04 02 03 01

6. (b) 7. (d) 8. (e)
9. (a) 10. (c)

Directions (11-15):



11. (b) 12. (a) 13. (d)
14. (c) 15. (e)

Direction (16-20): Logic- The different number codes for all the consonant as per the given condition are,

B-1, C-2, D-3, F-4, G-5, H-6, J-7

K-1, L-2, M-3, N-4, P-5, Q-6, R-7

S-1, T-2, V-3, W-4, X-5, Y-6, Z-7

Step 1: The consonants of the word '**NORMAL**' are to be coded as the number allotted to the consonant:

N	O	R	M	A	L
4	O	7	3(M)	A	2

Step 2: The numbers immediately preceded and followed by the vowels are to be coded as per the given conditions;
So, the code for consonant for word '**NORMAL**' is coded as '**4O73(M)A2**', numbers 4 and 7 is immediately followed and preceded respectively by '**O**' so, '4' is coded as '#1' and '7' is coded as '@#'. Similarly, '3' and '2' is immediately followed and preceded respectively by '**A**' so, '3' is coded as '#1' and '2' is coded as '@#'.

	N	O	R	M	A	L
Step 1:	4	O	7	3	A	2
Step 2:	#1	O	@#	#1(M)	A	@#

Step 3: Now the vowels are to be coded as per the given conditions, as 'O' comes after 'M' in the alphabetical series so 'O' is coded as '$$' and 'A' comes before 'M' in the alphabetical series so, 'A' is to be coded as '**'.

	N	O	R	M	A	L
Step 1:	4	O	7	3	A	2
Step 2:	#1	O	@#	#1(M)	A	@#
Step 3:	#1	$$	@#	#1	**	@#

So, the final code for the word '**NORMAL**' is '#1$$@##1**@#'.

16. (b); Therefore, the code for the word '**NORMAL**' is '#1$$@##1**@#'.

17. (d); **Step 1:** The consonants of the word '**EMBARKS**' are to be coded as the number allotted to the consonant:

E	M	B	A	R	K	S
E	3(M)	1	A	7	1	1

Step 2: The numbers immediately preceded and followed by the vowels are to be coded as per the given conditions;
So, the code for consonant for word '**EMBARKS**' is coded as '**E3(M)1A711**', number '3' is followed by vowel so the code for '3' is '**@#**' and numbers '1' and '7' is immediately preceded and followed respectively by '**A**' so, '1' is coded as '#1' and '7' is coded as '@#'. But the numeric code of 'K' and 'S' is '1' is neither followed by nor preceded by any vowel. Hence, there code will remain the same.

	E	M	B	A	R	K	S
Step 1:	E	3(M)	1	A	7	1	1
Step 2:	E	@#(M)	#1	A	@#	1	1

Step 3: Now the vowels are to be coded as per the given conditions, as 'E' comes before 'M' in the alphabetical series so 'E' is coded as '**' and 'A' comes before 'M' in the alphabetical series so, 'A' is to be coded as '**'.

	E	M	B	A	R	K	S
Step 1:	E	3(M)	1	A	7	1	1
Step 2:	E	@#(M)	#1	A	@#	1	1
Step 3:	**	@#	#1	**	@#	1	1

So, the final code for the word '**EMBARKS**' is '**@##1**@#11'.

18. (a); The code for ''SMITTLE' is '1#1**@#2#1**'.

	S	M	I	T	T	L	E
Step 1:	1	3	I	2	2	2	E
Step 2:	1	#1	**	@#	2	#1	**

19. (a); The code for 'ANNUAL' is '**@##1$$**@#'.

	A	N	N	U	A	L
Step 1:	A	4	4	U	A	2
Step 2:	**	@#	#1	$$	**	@#

20. (a);

	P	R	O	M
Step 1:	5	7	O	3
Step 2:	5	#1	$$	@#

Direction (21-25):

Compartment A	Compartment B	Compartment C
R	N	K
Q	P	V
M	Y	L
S	X	Z

21. (d) **22. (a)** **23. (b)**

24. (b) **25. (d)**

26. (b); Both course of action should be followed. For I, As the given statement states that ministry has forecasted the situation of flood, so the people of city A should move to city B as a preventive action. Also as an impact of flood here will be a lack of necessities so the people of city A should preserve these things.

Direction (27-30):

27. (d) **28. (d)** **29. (c)**

30. (c)

Direction (31-34):

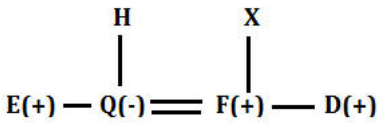
Subjects	Time slot
Math	6:30am-9:30am
English	9:30am-11:00am
Hindi	11:00am-12:30pm
Chemistry	12:30pm-2:30pm
Biology	2:30pm-5:30pm
Physics	5:30pm-8:30pm

31. (b) **32. (b)** **33. (a)**

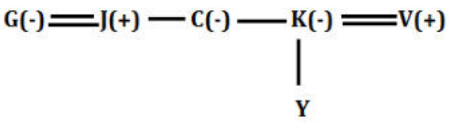
34. (b)

Direction (35-37):

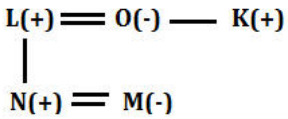
35. (c)



36. (d);



37. (c);



Direction (38-41):

Months/Dates	8th	17th	25th
January (31)	L	P	N
March (31)	Q	S	K
April (30)	O	M	R

Q>N>L>S>R>K>M>O>P

38. (b) **39. (d)** **40. (e)**

41. (d)

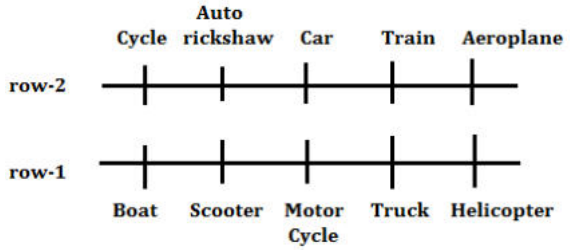
Directions (42-44):

42. (c); A man leave GIP at '®Å' me 6.10, he takes 20 min to reach WOW but he reaches 15 min late me he reach Wow at 6.45 me '®£'.

43. (d); Airplane departure time is '£µ' me 9.25, A person want to reach airport 20 minute earlier me he want to reach airport at 9.05, and he takes 40 minutes to reach airport me he should leave office 8.25 me 'αµ'.

44. (c); A man leave his home at '£∞' me 9.55, and he takes 2 hours to reach office from his home that me he reaches office at 11.55 me '∞∞'.

Directions (45-48):



45. (d) **46.** (a) **47.** (d)

48. (c)

49. (b); The demolition of unauthorized buildings would teach a lesson to the unscrupulous builders and also serve as a warning for the citizens not to indulge in such activities in the future. This is essential, as unauthorized constructions impose undue burden on the city's infrastructure. So, only argument II holds strong.

50. (e); Clearly, A wishes to study the degree of effect of pay revision on job satisfaction of employees. This me that job satisfaction can be measured and A is capable of making such a study. So, both I and II are implicit.

QUANTITATIVE APTITUDE

51. (c); Rahul runs for 15 minutes at a speed of 5 km/hr and 25 minutes at a speed of 9 km/hr
∴ Total distance covered by Rahul on treadmill
$= \frac{15}{60} \times 5 + \frac{25}{60} \times 9 = 1.25 + 3.75 = 5km$
A = 5km

52. (e); P_2 can complete work in $= 6 \times \frac{5}{4} = 7.5\ hours$
P_1 and P_2 together can complete total work in
$= \frac{6 \times 7.5}{6+7.5} = \frac{45}{13.5} = 3\frac{1}{3}\ hours$
⇒ P1 and P2 together can complete 75% work in
$= \frac{10}{3} \times \frac{75}{100} = 2.5\ hours$
They finish work at 12:30 p.m.
⇒ They start their work at 12:30 – 2:30 = 10 a.m.
B = 10 a.m.

53. (b); P_2 can complete work in $= 6 \times \frac{5}{4} = 7.5\ hours$
Rahul and P_2 can complete same work in 3 hours
⇒ Rahul can complete same work in
$= \frac{1}{\frac{1}{3}-\frac{1}{7.5}} = \frac{1}{0.2} = 5\ hours$
Ratio of efficiency of Rahul and P_1 is 6 : 5
$C = \frac{6-5}{5} \times 100 = 20\%$

54. (d); Distance between his house and his office is 45 km
$\Rightarrow His\ speed = \frac{45}{1.5} = 30km/hr$
Speed of stream is 3 km/hr
⇒ Upstream speed of boat = 30 − 3 = 27
Time to reach home i.e, $D = \frac{45}{27} = 1\frac{2}{3}\ hours$

55. (a); Each friend has 2 dices so there are total 36 outcomes by one friend.
If either Rahul or Aman throw their dices, then there are total 36 + 36 outcomes
So, E = 36 + 36 = 72

56. (e); Sum of outcomes of dices should be 8 so it can be (4,4), (3,5) and (2,6)
In (4,4)
Addition of square of outcomes $= 4^2 + 4^2 = 32$
In (3,5)
Addition of square of outcomes $= 3^2 + 5^2 = 34$
In (2,6)
Addition of square of outcomes $= 2^2 + 6^2 = 40$
Now Raman will win the game if he gets (2,6) and remaining two get (3,5) or (4,4)
So, option (e) is the correct answer

57. (d); Let length and breadth of rectangle be l cm and b cm respectively
So, ATQ
$\ell \times (b + 6) - b\ (\ell - 6) = 252$
$6\ (\ell + b) = 252$
$2\ (\ell + b) = 84$ cm

58. (b); Diagonal of square $= 2.5\sqrt{2} \times \sqrt{2} = 5$ cm
Length of rectangle $= 5 \times 3 = 15$ cm
Breadth = 5 cm
Area of rectangle $= 15 \times 5 = 75\ cm^2$

59. (e); Speed of boat in still water = 20 km/hr
Speed of stream $= \frac{20}{7}$ km/hr
Ratio of speed of boat in upstream to that of downstream = 6 : 8 ⇒ 3 : 4
Time taken by boat in upstream to that of downstream = 4 : 3
Required distance $= \left(20 + \frac{20}{7}\right) \times \frac{5 \times 3}{7} \approx 50$ km

60. (a); Ratio of profit of

A	:	B
800× 8+ 900+ 1000+ 1100+ 1200	:	1600× 8+ 1700+ 1800+ 1900+ 2000
53	:	101

Profit of A $\Rightarrow \frac{7700}{154} \times 53 = 2650$ Rs.

61. (c); Let initial investment of A = x
Ratio of profit
A : B : C
12 × x : 6 × 4500 : 4 × 4500
x : 2250 : 1500
Now ATQ
$\frac{x}{x+2250+1500} = \frac{49}{100}$
x ≈ Rs 3600

62. (c); S.P. of article D sold by Ravi = Rs.120
Profit % earned on article D by Ravi = 60%
Cost price of article D for Ravi = $\frac{120}{160} \times 100$ = Rs75
Profit earned by Shyam = $120 \times \frac{25}{100}$ = Rs30
Profit earned by Ravi = 120 – 75 = Rs 45
Required difference = 45 – 30 = Rs.15

63. (b); Cost price of article A = $\frac{105}{140} \times 100$ = Rs75
Cost price of article C = $\frac{150}{125} \times 100$ = Rs120
Required % = $\frac{120-75}{120} \times 100 = \frac{45}{120} \times 100 = 37.5\%$

64. (d); Cost price of article B = $\frac{60}{120} \times 100$ = Rs 50
Marked price of article B = 50 × 1.5 = Rs 75
Required discount % = $\frac{75-60}{75} \times 100$
$= \frac{15}{75} \times 100 = 20\%$

65. (e); Profit earned on selling article E = $\frac{90}{180} \times 80 = Rs\ 40$
Profit earned on selling article C = $\frac{150}{125} \times 25 = Rs\ 30$
Required difference = 40 – 30 = Rs 10

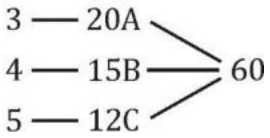
66. (b); Mark price of article A = $\frac{105}{84} \times 100$
= Rs 125
CP of article A = $\frac{105}{140} \times 100$ = Rs75
Mark up % of article A = $\frac{125-75}{75} \times 100 = 66\frac{2}{3}\%$

67. (c); $3^{x+5}.9^{2x-4} = 9^{5x-14}$
$\Rightarrow 3^{x+5}.3^{4x-8} = 3^{10x-28}$
$\Rightarrow 3^{x+5+4x-8} = 3^{10x-28}$
$\Rightarrow 3^{5x-3} = 3^{10x-28}$
$\Rightarrow 5x - 3 = 10x - 28$
$\Rightarrow 5x = 25$
$\Rightarrow x = 5$
And, $2y^2 - 15y - 28 = 3y^2 - 23y - 13$
$\Rightarrow y^2 - 8y + 15 = 0$
$\Rightarrow y^2 - 3y - 5y + 15 = 0$
$\Rightarrow y(y-3) - 5(y-3) = 0$
$\Rightarrow (y-5)(y-3) = 0$
$\Rightarrow y = 5, 3$
Quantity I: - Value of x = 5
Quantity II: - Value of y = 5 , 3
⇒ Quantity I ≥ Quantity II

68. (b); Quantity I:
Let C.P. → Rs 100
So, S.P. → Rs 129.6
ATQ,
M.P. → $\frac{129.6}{72} \times 100 \Rightarrow$ Rs 180
'x' ⇒ $\frac{180\times(100-30)}{100}$ -100 ⇒ 26%
Quantity II > Quantity I

69. (a); Let efficiency of 1 man, 1 woman and 1 child is m, w and c respectively
ATQ,
10 × 12m = 18w × 20 = 27c ×20
2m = 6w = 9c
Let total work = 120 m
Quantity I:
(9w + 9c) × 16 = (3m + 2m) × 16 = 80 m
Remaining work = 120 m – 80 m = 40 m
Number of men required to complete remaining work in one day = 40
Quantity II = 36
Quantity I > Quantity II

70. (a); Quantity I:-



Let total capacity of tank be 60.
Units filled in first three minutes = 3 + 4 + 5 = 12
Hence, total time taken = 5 × 3 = 15 minutes
Quantity II:-
Let waste pipe can empty the cistern in x min
$\frac{1}{10} + \frac{1}{15} - \frac{1}{x} = \frac{1}{18}$
$\Rightarrow \frac{1}{x} = \frac{9+6-5}{90} = \frac{10}{90}$
⇒ x = 9 minutes
Quantity I > Quantity II

Solution (71-75): -
House A →
Units consumed by Other appliances = 120 units
Let unit consumed by Lights = x
Then, Units consumed by Fans = $x - 30$
$x + x - 30 = 250 - 120$
$2x = 130 + 30$
$x = 80$
Units consumed by Lights = 80 units
Units consumed by Fans = 50 units
House B →
Units consumed by Lights = 80 $units$
Units consumed by Fans = $\frac{160}{100} \times 50 = 80\ units$
House C →
Total units consumed by Lights in all three houses = 200 units
⇒ Units consumed by Lights in house 'C' = 200 − 80 − 80
$= 40\ units$
Units consumed by Fans = 40 $units$
Units consumed by Other appliances = $40 \times \frac{225}{100} = 90\ units$
Total units consumed by Other appliances in House 'B'
$= 320 - 90 - 120 = 110\ units$

Units Consumed	Fans	Lights	Other appliances
House A	50	80	120
House B	80	80	110
House C	40	40	90

71. (a); Required % $= \frac{80-40}{40} \times 100 = 100\%$

72. (c); Total number of units consumed by Other appliances in House 'B', 'C' and 'D' together
$= 110 \times 3 = 330\ units$
Units consumed by Other appliances in House 'D'
$= 330 - 110 - 90 = 130\ units$

73. (e); Total units consumed in House 'A' and 'C' together
$= 50 + 80 + 120 + 40 + 40 + 90 = 420\ units$

74. (b); Required difference $= 110 - 90 = 20\ units$

75. (d); Total units consumed by Fans and Lights in House 'C'
$= 40 + 40 = 80\ units$
Total units consumed By Lights and Other appliances in House 'A' $= 80 + 120 = 200\ units$
Required % $= \frac{200-80}{200} \times 100 = \frac{120}{200} \times 100 = 60\%$

76. (c); C.P. of 10 note books $\Rightarrow 140 \times 10 = 1400$ Rs.
Profit on selling one pen $\Rightarrow \frac{50\times200}{100}$ = Rs 100
Number of pen required $\Rightarrow \frac{1400}{100} = 14$

77. (d); Let speed of slower train = 2x
$\Rightarrow$ speed of faster train = 5x
ATQ,
$\frac{150+200}{2x+5x} = 15$
$x = \frac{10}{3}$
Time required $= \frac{350}{\frac{50}{3}-\frac{20}{3}} = 35$ second

78. (b); Ratio of profit share of B and E is
$35\% \times 80{,}000 \times 9 : 15\%$ of $80{,}000 \times 12$
$= 7 : 4$
Required difference $= \frac{(7-4)}{11} \times 15400$
$= \frac{3}{11} \times 15400 = Rs\ 4200$

79. (d); Ratio of profit share of A, C and D is

A	:	C	:	D
$25\%\times80{,}000\times6$	:	$15\%\times80{,}000\times x$	:	$10\%\times80{,}000\times8$
150	:	15x	:	80
30	:	3x	:	16

ATQ,
$\frac{30}{30+16+3x} = \frac{6750}{13050}$
$\Rightarrow \frac{30}{46+3x} = \frac{15}{29}$
$\Rightarrow 46 + 3x = 58$
x = 4 months

80. (a); Amount invested by F $= \frac{15}{100} \times 80{,}000 + 4000$
$= 12000 + 4000 =$ Rs 16,000
Amount invested by A $= \frac{25}{100} \times 80{,}000 =$ Rs 20,000
Ratio of profit share of F, C and A

F	:	C	:	A
16000×6	:	12000×8	:	$20{,}000\times12$
2	:	2	:	5

ATQ,
$5 + 2 \rightarrow 8750$
Then total annual profit $= 9 \rightarrow \frac{8750}{7} \times 9 =$ Rs 11,250

81. (c); I. $(x-2)^2 = 9$
$\Rightarrow (x-2) = \pm 3$
$\Rightarrow x = 5, -1$
II. $(2y+8)^2 = 16$
$(2y+8) = \pm 4$
$\Rightarrow y = -2, -6$
$x > y$

82. (e); I. $x^2 - 16x + 64 = 0$
$x^2 - 8x - 8x + 64 = 0$
$x(x-8) - 8(x-8) = 0$
$(x-8)(x-8) = 0$
$x = 8, 8$
II. $y^2 - 16y + 63 = 0$
$y^2 - 7y - 9y + 63 = 0$
$y(y-7) - 9(y-7) = 0$
$(y-9)(y-7) = 0$
$y = 9, 7$
No relation can be established between x & y

83. (d); I. $\frac{25}{x^2} - \frac{15}{x} + 2 = 0$
$\Rightarrow 2x^2 - 15x + 25 = 0$
$\Rightarrow 2x^2 - 10x - 5x + 25 = 0$
$2x(x-5) - 5(x-5) = 0$
$(2x-5)(x-5) = 0$
$x = \frac{5}{2}, 5$
II. $\frac{40}{y^2} + 1 = \frac{13}{y}$
$\Rightarrow y^2 - 13y + 40 = 0$
$\Rightarrow y^2 - 8y - 5y + 40 = 0$
$\Rightarrow y(y-8) - 5(y-8) = 0$
$(y-5)(y-8) = 0$
$y = 5, 8$
$y \geq x$

84. (d); I. $\frac{48}{x^2} - \frac{14}{x} + 1 = 0$
$\Rightarrow x^2 - 14x + 48 = 0$
$\Rightarrow x^2 - 8x - 6x + 48 = 0$
$\Rightarrow x(x-8) - 6(x-8) = 0$
$\Rightarrow (x-8)(x-6) = 0$
$x = 8, 6$
II. $\frac{45}{y^2} + \frac{1}{y} = 2$
$\Rightarrow 2y^2 - y - 45 = 0$
$\Rightarrow 2y^2 - 10y + 9y - 45 = 0$
$\Rightarrow 2y(y-5) + 9(y-5) = 0$
$\Rightarrow (2y+9)(y-5) = 0$
$y = 5, -\frac{9}{2}$
$x > y$

85. (e); I. $x^2 + 3x - 4 = 0$
$x^2 + 4x - x - 4 = 0$
$x(x + 4) - 1(x + 4) = 0$
$(x - 1)(x + 4) = 0$
$x = 1, -4$
II. $y^2 + 10y + 24 = 0$
$y^2 + 4y + 6y + 24 = 0$
$y(y + 4) + 6(y + 4) = 0$
$(y + 6)(y + 4) = 0$
$y = -4, -6$
$x \geq y$

86. (c); From I, II & III
Let speed of Amit and Abhi be 4x and 5x km/hr respectively.
$5x - 4x = 20$
$\therefore x = 20$ km/hr
Let distance be d km
$\frac{d}{80} - \frac{d}{100} = 1$
$\therefore d = \frac{80 \times 100}{20} = 400$ km

87. (b); From I and II
Let length and breadth be 3x m and 2x m respectively
$2\pi r = 440$ [r → radius of circle]
$r = 70$ m
$\therefore$ breadth = 10 m
& length = 15 m
$\therefore$ Area $= 10 \times 15 = 150\ m^2$
Statement I and III are same.

88. (a); From I
Passed = 400
From III
Let number of appeared & Failed students be 5x and 3x respectively
$2x = 400 \Rightarrow x = 200$
$\therefore$ failed = appeared – passed
$= 1000 - 400$
$= 600$

89. (a); **From I**
$\frac{PR \times 2}{100} = 44000$
$PR = 2200000$
From II
$P + \frac{PRT}{100} = 154000$
From III
Difference $= \frac{PR^2}{100^2}$
$\frac{PR^2}{100^2} = 120$
From I and III R can be found.

90. (e); Let the smaller no. is x & bigger no. is y.
From I
$Y = x + 6$
From II,
$\frac{40}{100} \times x = \frac{30}{100} \times y$
From III,
$\frac{\frac{y}{2}}{\frac{x}{3}} = \frac{2}{1}$
$\Rightarrow 3y = 4x$
$\therefore$ from I and II or I and III

91. (b); Let amount of milk removed = 2x lit
So, amount of water added = x lit
Now
$\rightarrow \frac{165 - 2x}{x} = \frac{5}{3}$
x = 45 lit

92. (c); At least one black can be chosen in three ways:
1. first one is black, second is non-black
2. first one is non-black, second is black
3. both are black.
Probability of selecting a box is $\frac{1}{2}$
Now, probability of choosing at least one black ball from first box $= \frac{1}{2} \times \left(\frac{2}{4} \times \frac{2}{3} + \frac{2}{4} \times \frac{2}{3} + \frac{2}{4} \times \frac{1}{3}\right) = \frac{5}{12}$
Probability of choosing at least one black ball from 2nd box $= \frac{1}{2} \times \left(\frac{4}{16} \times \frac{12}{15} + \frac{12}{16} \times \frac{4}{15} + \frac{4}{16} \times \frac{3}{15}\right)$
$= \frac{27}{120}$
final probability $= \frac{5}{12} + \frac{27}{120} = \frac{50+27}{120} = \frac{77}{120}$

93. (a); Let speed of train B be x m/s
And length of train B be y m
Then length of train A is $2y$ m
Speed of train A $= 84 \times \frac{5}{18} = \frac{210}{9}$ m/s $= \frac{70}{3}$ m/s
A.T.Q,
$\frac{2y+y}{10} = \frac{70}{3} - x$ .....(i)
and $\frac{2y+y}{22.5} = \frac{70}{3} - 2x$
solving (i) and (ii), $y = 50$ m

94. (c); Let, inner radius of cylinder be 'x' cm.
$\frac{4}{3}\pi(6)^3 = \pi \times 32\ (5^2 - x^2)$
or, $\frac{4 \times 6 \times 6 \times 6}{3 \times 32} = 25 - x^2$
or, $x^2 = 25 - 9$
or, $x = 4$ cm
Hence, thickness = 5 – 4 = 1 cm.

95. (b); X's investment
$= (700 \times 3) + \left(700 \times \frac{5}{7} \times 3\right) + \left(500 + 200 \times \frac{3}{5}\right) \times 6$
= Rs. 7320
Y's investment = 600 × 12 = Rs. 7200.
$\therefore$ X's share from profit
$= \frac{7320}{(7320+7200)} \times 726 = Rs.366.$

96. (a); Total man working on odd days in March
$= \frac{1000 \times 30}{100} = 300$
Total odd days in March = 16
Total man hour = 300×16×8
Similarly,
Total man hour of April on even days = 15 × 8 × 1200
$Required\ \% = \frac{300 \times 16 \times 8}{15 \times 8 \times 1200} \times 100 = 26\frac{2}{3}\%$

97. (d); Total man hour of April $= \frac{1500}{100} \times [20 \times 15 + 80 \times 15] \times 8$
$= 1,80,000$
Total man hour of August
$= 750 \times \frac{40}{100} \times 15 \times 8 + 16 \times 750 \times \frac{60}{100} \times 8$
$= 36000 + 57600$
$= 93,600$
Required difference $= 1,80,000 - 93,600 = 86,400$

98. (b); Required ratio $= \frac{10 \times 15 \times 70 \times 8}{15 \times 75 \times 4 \times 8}$
$= 7 : 3$

99. (c); Man-hour on odd days on April $= 15 \times 300 \times 8$
$= 36000$
Man-hour on odd days on August $= 16 \times 75 \times 6 \times 8$
$= 57600$
$required\ \% = \frac{57600 - 36000}{57600} \times 100 = 37.5\%$

100. (a); Man-hour on even days →
March $= 15 \times 8 \times 700 = 84,000$
April $= 15 \times 8 \times 1200 = 1,44,000$
August $= 15 \times 8 \times 300 = 36,000$
Required Average $= 88,000$

ENGLISH LANGUAGE

101. (a); The sentence is describing about a shift in the technology in the telecom industry. It has also mentioned about the challenges faced by the industry few years ago. Therefore, to adhere to the context of the sentence "paranoid" should be replaced by "paradigm" while "triumph" should be replaced by "havoc". Hence, option (a) is the most suitable answer choice.
Paranoid means unreasonably or obsessively anxious, suspicious, or mistrustful.
Triumph means a great victory or achievement.
Paradigm means a typical example or pattern of something; a pattern or model.
Havoc means widespread destruction.

102. (d); Words "mislead" and "consensus" create a contextual error in the sentence and thus should be replaced by "misconceptions" and "compliance" respectively. Hence, option (d) is the most suitable answer choice.
Emissions means the production and discharge of something, especially gas or radiation.
Consensus means a general agreement.
Eminences means to fame or acknowledged superiority within a particular sphere.
Compliance means the action or fact of complying with a wish or command.

103. (d); The words given in bold "hawking", "variance" and "hosts" create either grammatical or contextual error in the sentence. To correct the sentence, replace these words by "tracking", "vicious" and "honchos" respectively. Hence, option (d) is the most suitable answer choice.
Hawking means (of a person) hunt game with a trained hawk.
Variance means the fact or quality of being different, divergent, or inconsistent.
Vicious means deliberately cruel or violent.
Honchos means a leader or manager; the person in charge.

104. (c); Since the sentence is describing about the developments and advancements made in the recent time, the bold words "preserving" and "raising" create grammatical as well as contextual errors in the sentence. To make the sentence correct, replace these words by "urbanization" and "rising" respectively. Therefore, option (c) becomes the most suitable answer choice.

105. (c); The words given in bold "had" and "compete" create either grammatical or contextual error in the sentence. To correct the sentence, replace these words by "having" and "competitive" respectively. The sentence is given in the present tense […can give paint manufacturers], it requires a gerund [Having] that works as a subject in the sentence, therefore, "had" should be replaced to frame a grammatically correct structure of the sentence. Moreover, to describe the quality of "pricing" an adjective [competitive] is required rather than a verb [compete]. Hence, option (c) is the most suitable answer choice.

106. (d); The appropriate answer is option (d). The answer can be referred from paragraph 1 where it is mentioned that legal position of beggars in India has always been uncertain. "The Bombay Prevention of Begging Act (BPBA), 1959, which has held sway for decades, rests on the premise that poverty equals criminality. This allows the state to arrest people without a warrant on nothing more than a "suspicion," and put them out of the public gaze."

107. (c); The correct choice here is option (c). We can refer to paragraph 1 where it is given that the court quashed those provisions of the BPBA that make begging a punishable offence. However, its ruling is applicable only to Delhi.

108. (b); Option (b) is the only appropriate choice here. The answer can be derived from paragraph 2 where it is mentioned that speculation of beggars as legal outsider means inhabiting the same territorial space that is India but disenfranchised from the benefits of Indian citizenship that guarantees constitutional rights.

109. (d); Option (d) is the appropriate choice. Refer to paragraph 3 where it is given that in these raids, even those not begging but found in dirty clothes and wandering were arrested arbitrarily. Transgender persons, for example, are particularly vulnerable.

110. (b); Option (b) is the appropriate choice. It is the only option which is false according to the passage. Instead correcting it, the right statement would be as follows: The criminal begging ring racketeers are hardly the ones who are arrested in the raids. Rest all of the given options are true.

111. (b); Only option (b) is the correct choice. The answer can be referred from paragraph 4, where it is explicitly expressed in the absence of immediate structural improvement, the least the state governments in India can do is decriminalize begging.

112. (d); The grammatically correct sentence is sentence (d). There are grammatical errors in sentence (A) and options (a), (b) and (c). In sentence (A), with the plural subject "provisions", the determiner associated to it should be plural as well. Similarly, in option (a), along with the plural determiner [those] the subject should also be in its plural form [provision]. Moreover, in sentence (b) the subject provision is singular, therefore to comply with the rule of subject-verb agreement, the verb associated to it must be singular too [makes]. Likewise, in option (c), with the plural subject [provisions], the verb must be plural to adhere to the correct grammatical syntax [make]. Since option (d) is grammatically viable, it becomes the most feasible answer choice.

113. (d); The paragraph is describing about declaration made PM regarding the sanitation needs of young female. Therefore, the most appropriate phrase that will fill the blank of the paragraph, adhering to the absolute context of the paragraph is "to ensure toilets are separately built for girls in government schools". The hint for the same can be drawn from the phrase [...that when sanitation needs of young female students are met...]. Moreover, option (b) is incorrect as the latter part of the paragraph suggests the need for sanitation of young women, which should have some relevance with the previous part of the paragraph; option (b) fails to provide any such information and thus cannot be used to complete the paragraph. Hence, option (d) is the most suitable answer choice.

114. (b); The paragraph his describing about the influences of paid news during the election. It has also provided evidence for the same stating 42 cases of paid news in the election of BJP's Narottam Mishra from Datia, MP. The latter part of the paragraph mentions about the norms under which the legitimized action is effectuated.Thus, the most appropriate sentence that should complete the paragraph is "In 2017, the ECI ordered Mishra's disqualification and barred him from contesting elections for three years", as it connects the previous and the later part of the paragraph. All the other sentences fail to provide coherence to the paragraph; hence, option (b) is the most suitable answer choice.

115. (d); Option (d) is the correct choice for the given question.
CAB is the correct sequence of the given sentence.
C is the first sentence as it provides the basis of the argument which is the asymmetry in federalism.
A gives additional information about this asymmetry which was talked about in sentence **C. B** is the third sentence as it is talking about its (article 370) original form and the reason for the debate which was mentioned in **C.**

116. (b); The most suitable word that will fit in all the three blanks of the paragraph is "currency". All the words are however seems similar but have little difference and thus does not fit contextually in the sentence. Hence, option (b) is the most suitable answer choice.
Money means a current medium of exchange in the form of coins and banknotes; coins and banknotes collectively.
Currency means a system of money in general use in a particular country.
Worth means equivalent in value to the sum or item specified.
Value means the regard that something is held to deserve; the importance, worth, or usefulness of something.
Rupees means the basic monetary unit of India

117. (e); The most appropriate word that should fill all the three blanks of the paragraph is "medical". Since, the alternatives provide different streams of education; the most suitable one to adhere to the context of the paragraph is "medical". This is indicated from the phrase of the first sentence "...big issue in health care". Hence, option (e) is the most viable answer choice.

118. (b); The most appropriate word that should fill all the blanks of the sentence is "rural". All the other words are either grammatically incorrect or contextually. Hence, option (b) is the most suitable answer choice.
Advanced means far on or ahead in development or progress.
Insolvent means unable to pay debts owed.

119. (a); The most appropriate word that should fill all the blanks of the sentence is "policy". All the other words are either grammatically incorrect or contextually. Hence, option (a) is the most suitable answer choice.
Policy means a course or principle of action adopted or proposed by an organization or individual.
Procedure means an established or official way of doing something.

Practice means the actual application or use of an idea, belief, or method, as opposed to theories relating to it.

120. (e); The most appropriate word that should fill all the blanks of the sentence is "story". All the other words are either grammatically incorrect or contextually. Hence, option (e) is the most suitable answer choice.
Autobiography means an account of a person's life written by that person.
Fiction means literature in the form of prose, especially novels, that describes imaginary events and people.

121. (c); The passage apprises us that the government is requesting the Supreme Court to enforce "stricter directions" to social networking sites like Facebook and YouTube. It could be understood that the government wants '**more obedience**' from the social networking sites and is trying to achieve her intent through requesting the Supreme Court.
Acrimonious, Acerbic, Sardonic, Sarcastic are synonyms and mean 'sharp and forthright.'
Sarcastic means 'Marked by or given to using irony in order to mock or convey contempt.'
Rigorous means '(of a person) adhering strictly to a belief or system'; 'Harsh and demanding';
Rigorous is a synonym of 'strict' which means '(of a rule or discipline) demanding total obedience or observance; rigidly enforced.'
From the above, we find out that the meaning of '**rigorous**' correctly convey the **intent or attitude** of the Government toward the social networking sites.
So, the correct answer is **option (c).**

122. (d); Contention [noun] means 'heated disagreement'. The paragraph suggests that on the issue of making accessible the origin of a content on WhatsApp is a **heated disagreement** between the Government and WhatsApp. Meaning that the WhatsApp is **reluctant** toward making the origin of a content on WhatsApp accessible to the law enforcement agencies. Hence, option (d) is the correct answer.
Insidious [noun] 'Proceeding in a gradual, subtle way, but with very harmful effects';
Exuberant [adjective] 'Full of energy, excitement, and cheerfulness';
Fanatical [adjective] 'Filled with excessive and single-minded zeal.';
Vehement [adjective] 'Showing strong feeling; forceful, passionate, or intense';

123. (a); The state government of Kerala seems to be **angry** with the indifferent attitude shown by the state government of Tamil Nadu and the ignorance of the repeated entreaties (signed by the Tamil Nadu) in relation to the controlled release of water from the reservoir. The state government of Kerala believes that the attitude of the state government of Tamil Nadu is responsible for the flood in the state.
Censure [noun]: 'strong criticism or disapproval';
Insidious [noun]: 'Proceeding in a gradual, subtle way, but with very harmful effects';
Pernicious [noun]: 'having a very harmful effect or influence';
Forbiddingly [noun]: 'unfriendly and likely to be unpleasant or harmful';
From the given paragraph, we understand that the intent of the state government of Kerala is not malicious and not to Harm the state government of Tamil Nadu, but Kerala was **criticizing** the government of the Tamil Nadu. So, Options (c), (d) and (e) are Not correct.
Only option (a) **correctly** convey the intent of the state government of Kerala and is the correct answer.

124. (e); Upon reading the passage, one understands that the state of Tamil Nadu made statements in an out-spoken or forthright manner.
Acerbic [adjective] means (especially of a comment or style of speaking) sharp and forthright.
Sardonic & Sarcastic [adjective] means Grimly mocking or cynical.
From the above illustrated meanings of the options, one can understand that the meaning of the word '**acerbic**' is the Closest to the tone of the statements made by the state of Tamil Nadu.
Hence, option (e) is the correct answer.

125. (a); The given paragraph is providing information about the court's order regarding the declaration of animals as legal persons. However, the paragraph further mentions that this order will not have a lasting impact on animal welfare. Moreover, it is to be noted that it mentions about the strengthening of the Wildlife Protection Act, 1972, and the Prevention of Cruelty to Animals Act, 1960 and does not comment on their implementation, hence, option (c) is incorrect. Therefore, the most suitable answer choice is option (a).

126. (e); "Aberrant" means departing from an accepted standard or diverging from the normal type. Therefore, "Deviant: Abnormal" is the set of words that expresses the meaning of the given highlighted word. Hence, option (e) is the most suitable answer choice.
Inane means lacking sense or meaning; silly.
Anomalous means deviating from what is standard, normal, or expected.
Amulet means an ornament or small piece of jewellery thought to give protection against evil, danger, or disease.

127. (b); "Meticulous" means showing great attention to detail; very careful and precise. Therefore, the set of words that consists of its synonym and antonym is "Scrupulous : Slapdash". Hence, option (b) is the most suitable answer choice.

Conscientious means wishing to do one's work or duty well and thoroughly.
Nemesis means the inescapable agent of someone's or something's downfall.
Scrupulous means (of a person or process) careful, thorough, and extremely attentive to details.
Slapdash means done too hurriedly and carelessly.
Sloppy means careless and unsystematic; excessively casual.
Subservient means prepared to obey others unquestioningly.

128. (a); "Eccentric" means (of a person or their behaviour) unconventional and slightly strange. Therefore, the set of words that reflect the synonyms of the given highlighted word is "Peculiar : Bizarre". Hence, option (a) is the most suitable answer choice.
Peculiar means different to what is normal or expected; strange.
Bizarre means very strange or unusual.
Altruistic means showing a disinterested and selfless concern for the well-being of others; unselfish.
Magnanimous means generous or forgiving, especially towards a rival or less powerful person.
Bloated means swollen with fluid or gas.
Capacious means having a lot of space inside; roomy.
Chaste means without unnecessary ornamentation; simple or restrained.

129. (d); "Ecstasy" means an overwhelming feeling of great happiness or joyful excitement. Therefore, the set of words that consists of its synonym and antonym is "Rapture: Insouciance". Hence, option (d) is the most suitable answer choice.
Effectual means (of something inanimate or abstract) successful in producing a desired or intended result; effective.
Hilarity means extreme amusement, especially when expressed by laughter
Garbled means reproduce (a message, sound, or transmission) in a confused and distorted way.
Rapture means a feeling of intense pleasure or joy.
Insouciance means casual; lack of concern; indifference.
Fatuous means silly and pointless.
Erudite means having or showing great knowledge or learning.

130. (c); "Impunity" means exemption from punishment or freedom from the injurious consequences of an action. Therefore, the set of words that reflect the antonyms of the given highlighted word is "Incarceration: Captivity". Hence, option (c) is the most suitable answer choice.
Livid means furiously angry.
Morbid means characterized by an abnormal and unhealthy interest in disturbing and unpleasant subjects, especially death and disease.
Dispensation means exemption from a rule or usual requirement.
Incarceration means the state of being confined in prison; imprisonment.
Nullify means
Captivity means the condition of being imprisoned or confined.
Salvation means preservation or deliverance from harm, ruin, or loss.
Incongruous means not in harmony or keeping with the surroundings or other aspects of something.
Kindred means similar in kind; related.
Obsessive means of the nature of an obsession.

131. (a); The most appropriate sentence that is grammatically and contextually viable in accordance to the meaning of the given sentence is sentence (a) as, the meaning of the phrase "to let sleeping dogs lie" is to ignore a problem because trying to deal with it could cause an even more difficult situation. All the other sentences are contextually incorrect; hence, option (a) is the most suitable answer choice.

132. (d); The most appropriate sentence that is grammatically and contextually viable in accordance to the meaning of the given sentence is sentence (d) as, the meaning of the phrase "cat got your tongue" is used when someone has nothing to say. All the other sentences are contextually incorrect; hence, option (d) is the most suitable answer choice.

133. (a); The most appropriate sentence that is grammatically and contextually viable in accordance to the meaning of the given sentence is sentence (a) as, the meaning of the phrase "cat on hot bricks" is used to express when someone is restless or skittish, unable to remain still. All the other sentences are contextually incorrect; hence, option (a) is the most suitable answer choice.

134. (c); Only option (c) is the appropriate choice. Refer to paragraph 1 where it is mentioned that customer satisfaction is the measure of how the needs and responses are collaborated and delivered to excel customer expectation. It can only be attained if the customer has an overall good relationship with the supplier.

135. (e); Option (e) is the correct choice. The answer can be deduced from paragraph 1 where it is mentioned that customer satisfaction is a part of customer's experience that exposes a supplier's behavior on customer's expectation. This depends on various business aspects like marketing, product manufacturing, engineering, quality of products and services, responses customer's problems and queries, completion of project, post delivery services, complaint management etc. Hence option (e) is the answer.

136. (c); Option (c) is the suitable choice. This can be inferred from paragraph 2 where it is given that there are good chances for supplier to retain the customers to enhance repeated purchases and make good business profits. Whereas rest all of the given options are not mentioned in the paragraph. And hence so they are irrelevant.

137. (c)'; Only option (c) is the correct choice. We can infer our answer from paragraph 2 where it is mentioned that it is necessarily required for an organization to interact and communicate with customers on a regular basis to increase customer satisfaction. In these interactions and communications, it is required to learn and determine all individual customer needs and respond accordingly. Even if the products are identical in competing markets, satisfaction provides high retention rates.

138. (d); The suitable answer is option (d). The answer can be deduced from paragraph 4 where it is given an ideal CRM system is a centralized collection of all data sources under an organization and provides an atomistic real time vision of customer information. It piles up this information centrally, examines it and then makes it addressable within all the departments.

139. (b); Option (b) is the correct answer. Among all of the given options only option (b) is false according to the passage. It can be referred from paragraph 4 where it is given a CRM system is not only used to deal with the existing customers but is also useful in acquiring new customers. Rest all of the given options are true.

140. (a); Sentence (A) contains grammatical errors in it. It is to be noted that usage of "in case" while using "if" becomes incorrect as "in case" itself means 'if it is true that', thus one of the words become redundant. Thus, option (b) and (c) are also eliminated. Moreover, to define the quality of the markets an adjective must be used [competing], instead of a noun [competition]. Therefore, option (d) is also eliminated. Since, option (a) is grammatically as well as contextually correct, it becomes our most suitable answer choice.

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REASONING ABILITY

Directions (1-5): Study the following information carefully and answer the questions which follow-
Eight persons S, T, U, V, W, X, Y and Z live on 8 different floors in a building the ground floor is numbered 1 then numbered 2 till numbered 8. They like different colours i.e., red, pink, orange, blue, grey, green, yellow and purple.
There are four floors between W's floor and S's floor. W lives on an odd numbered floor. S like Yellow colur. There are two floors between T's and W's floor. The one who likes Grey colour lives on immediate above the floor on which S lives. U lives immediate above Y. The one who likes red colour lives on floor numbered one. There is no floor between T's floor and Z's floor. V does not live immediate above or below to W's floor. Only one person lives between the persons who like yellow and purple colours. The one who likes pink colour lives immediate above the floor on which the person who likes Grey colour. Z likes blue colour but does not live below to T. X likes Green colour.

1. On which floor Z lives?
(a) Third (b) Fourth (c) Fifth
(d) Sixth (e) Seventh

2. How many floors are below the floor on which Y lives?
(a) Three (b) Four (c) Five
(d) Six (e) Seven

3. Who among the following lives on the second floor?
(a) X (b) V (c) Y
(d) U (e) S

4. Which colour is liked by V?
(a) Orange (b) Pink (c) Grey
(d) Red (e) Purple

5. Which of the following is true with respect to T?
(a) T likes Orange colour and lives on 4th floor?
(b) T like Pink colour and lives on 8th floor
(c) T like Purple colour and lives on 4th floor
(d) T like Grey colour and lives on 7th floor
(e) T like Red colour and lives on 8th floor

Direction (6-10): Study the following information to answer the given question.

- Eight friends E, F, G, H, L, M, N and O are seated in a straight line, facing north, but not necessarily in the same order.
- O sits at the extreme right end of the line. Only four people sit between O and G.
- Both F and M are immediate neighbours of G.
- Only two people sit between M and L. L is not an immediate neighbor of O.
- N sits second to left of E.

6. What is the position of L with respect to G?
(a) Third to the right (b) To the immediate left
(c) Second to the right (d) Fourth to the right
(e) Second to the left

7. Based on the given arrangement, which of the following is true with respect to N?
(a) Only three persons sit between N and O.
(b) None of the given options is true.
(c) Only one person sits to the right of N.
(d) E sits to immediate right of N.
(e) Both L and F are immediate neighbours of N

8. Who amongst the following people represents the person seated at the extreme left end of the line?
(a) E (b) N (c) L
(d) F (e) H

9. How many persons are seated between O and E?
(a) Two (b) Three (c) None
(d) Four (e) One

10. Who amongst the following sit exactly between M and L?
(a) E, N (b) F, O (c) F, G
(d) E, G (e) H, N

Directions (11-15): In each question below is given a group of letters followed by four combinations of digits/symbols numbered (1), (2), (3) and (4). You have to find out which of the combinations correctly represents the group of letters based on the following coding system and mark the number of that combination as the answer. If none of the four combinations correctly represents the group of letters, mark 5), ie 'None of these', as the answer.

Letter	L	F	J	T	A	H	I	M	R	E	K	D	U	B	P
Digit/Symbol	3	7	#	$	4	9	1	8	2	@	6	%	©	*	5

Conditions:

1) If the first letter is a consonants and the last letter is a vowel their codes are to be interchanged.
2) If both the first and the last letters is Vowel both are to be coded as +.
3) If both the first and the last letters is Consonant and in between there are two or more vowels are to be coded as 8.
4) If the first letter is vowel and the last letter is a consonant, both are to be coded as the code for the consonant.

11. EFHKLB
(a) @7963* (b) *7963* (c) @7963@
(d) *7S63@ (e) none of these.

12. FTAMIR
(a) 7$4812 (b) 7$1842 (c) 7$8882
(d) 7$189% (e) none of these.

13. DKPRTB
(a) *652$% (b) %652$% (c) +652$+
(d) *652$* (e) none of these

14. UPJTRA
(a) 45#$2© (b) ©5#$24 (c) ©5#$2©
(d) +5#$2+ (e) none of these

15. HLEKBI
(a) 13@6*9 (b) 93@6*1 (c) 13@6*1
(d) 93@6*9 (e) None of these

Directions (16-20): Study the following information and answer the questions given.
In a certain code language 'lu ja ka hu' means 'will you meet us', 'fa ka la ju' means 'will today maximum temperature', 'la fu ja ju' means 'meet today the temperature' and 'ju lu na fu' means 'temperature of the us'. then

16. What is the code of 'today' in this code language?
(a) ju (b) la (c) fa
(d) ka (e) cannot be determined

17. What is the code of 'you' in this code language?
(a) hu (b) lu (c) ka
(d) ja (e) cannot be determined

18. What is the code of 'you of maximum'?
(a) ha hu fu (b) fa hu na (c) fu lu na
(d) hu fa la (e) cannot be determined

19. What is the code of 'us' in this code language?
(a) hu (b) lu (c) ja
(d) ka (e) cannot be determined

20. What is the code of 'meet' in this code language?
(a) hu (b) lu (c) ja
(d) ka (e) cannot be determined

Directions (21-25): In the following questions, the symbols @, ©, %, $ and ✶ are used the following meaning as illustrated below:
'A©B' means 'A is smaller than Q'.
'A@B' means 'A is either smaller than or equal to Q'.
'A%B' means 'A is greater than Q'.
'A $ B' means 'A is either greater than or equal to Q'.
'A✶B' means 'A is equal to Q'.
Now in each of these questions assuming the given statements to be true, find which of the two conclusions I and II given below them is/are definitely true? Give answer
(a) if only Conclusion I is true.
(b) if only Conclusion II is true.
(c) if either Conclusions I or II is true.
(d) if neither Conclusions I nor II is true.
(e) if both Conclusions I and II are true.

21. **Statements:** B © T, T ✶ M, M % F
Conclusions: **I.** B © M **II.** B © F

22. **Statements:** M ✶ R, R % T, T $ K
Conclusions: **I.** K @ M **II.** K © M

23. **Statements:** W © D, D @ H, H ✶ N
Conclusions: **I.** N $ D **II.** W © N

24. **Statements:** W @ D, D $ R, R © K
Conclusions: **I.** R ✶ W **II.** R % W

25. **Statements:** F $ J, J % V, V © N
Conclusions: **I.** N $ F **II.** N % J

Directions (26-30) : Each of the questions below consists of a question and two statements numbered I and II. You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and answer–
(a) If the data in statements I alone is sufficient to answer the question while the data in statement II are not sufficient to answer the question.
(b) If the data in statement II alone is sufficient to answer the question while the data in statement I are not sufficient to answer the question.
(c) If the data in either statement I alone or statement II alone are sufficient to answer the question.
(d) If the data even in both statement I and statement II together are not sufficient to answer the question.
(e) If the data in both statement I and statement II together are necessarily to answer the question.

26. Among 6 persons U, V, W, X, Y and Z, who are sitting around circle facing to the centre. Who sits immediate right of W?
Statements:
I. X sits second to the left of Y and opposite to U but not near to W.
II. Only one person is seated between U and V. Y is seated near to Z.

27. How P is related to R?
Statements:
I. Q is father-in-law of R, who is mother of S. P is grandmother of S.
II. T is father of P, who is son-in-law of U. U has only one grand-daughter R, who is also a grand-daughter of T.

28. Who among P, Q, R, S, T, and U is the tallest?
Statements:
I. S and R are taller than P but shorter than U. Q is taller than T.
II. U is shorter than T but taller than Q and S. while P is not tallest.

29. In which direction is Q from of P.
Statements:
I. Q is towards north of O, which is towards the east of P.
II. R is towards east of M and P is towards the west of T.

30. How many person are sitting in a row?

Statements:
I. A is on 16th position from the right end of the row. M is on 8th position from the left end of the row.
II. A is 18th from the left end and 20th from the right end of the row.

Directions: (31-35): Study the following information carefully and answer the questions given below:
Six girls – A, B, C, D, E and F are sitting in a row facing North and six boys – P, Q, R, S, T and U are sitting in a different row facing South, but not necessarily in the same order. Each girl in a row is facing exactly one boy from the other row. The following information is known about them.
P sits second to the right of the person who sits opposite B. B does not sit at any end of the row. C and D are immediate neighbors of B, and one of them sits at an extremes. E sits second to the left of D but not opposite R.
P is a neighbor of R but is not opposite F. Neither Q nor T are adjacent to P. T is adjacent to either R or Q but not both. U is a neighbor of the person who sits opposite E.

31. Who sits opposite C?
(a) S (b) P (c) R
(d) Q (e) T

32. Who sits second to the left of R?
(a) S (b) T (c) P
(d) Q (e) U

33. If S and D interchange their positions, then who sits to the immediate left of D?
(a) U (b) R (c) P
(d) T (e) Q

34. Four of the following five are alike in a certain way and so form a group. Find the one which does not belong to that group?
(a) U, A (b) P, B (c) D, S
(d) C, R (e) D, T

35. Which of the following is true, according to the given information?
(a) U and C are at the extremes.
(b) R sits second to the right of S.
(c) T sits to the immediate right of Q.
(d) B sits second to the left of A.
(e) All the above

Directions (36-37) : Triangle represents ▲(1) and circle represents ●(0). If triangle appears in unit's place then its value is 1. If it appears in 10's place its value is doubled to 2 like that it continues. Questions based on this
For example:
▲=1
▲●▲=4,0,1=4+0+1=5
▲●=2

36. How will you represent '13' in this code language?
(a) ▲▲●▲
(b) ●▲▲●
(c) ●▲▲▲
(d) ●▲●
(e) ▲

37. What will be the code for ▲▲●▲▲?
(a) 19 (b) 20 (c) 22
(d) 27 (e) 25

Directions (38-40) : Study the following information carefully and answer the questions which follow–
'P – Q' means 'P is father of Q'
'P ÷ Q' means 'P is sister of Q'
'P × Q' means 'P is mother of Q'
'P + Q' means 'P is brother of Q'

38. Which of the following means 'A is nephew of B'?
(a) A + C – B × K (b) B ÷ H – A + D
(c) B ÷ G – A ÷ R (d) B + T × A ÷ E
(e) None of these

39. Which of the following means 'P is grandfather of J'?
(a) J ÷ W – U – P (b) P × G + J ÷ A
(c) P – B ÷ J ÷ R (d) P – T – J ÷ S
(e) None of these

40. How is R related to B in the expression 'B ÷ C – S + R'?
(a) nephew or niece (b) niece
(c) nephew (d) None of these
(e) Cannot be determined

Directions (41 – 45): Answer the questions on the basis of the information given below.
A number arrangement machine when given an input of words, rearranges them following a particular rule in each step. The following is an illustration of input and steps of rearrangement.
Input : 98 Bite 102 Legal 88 54 Mango 21 Cool Zing.
Step1: Bite 98 Legal 88 54 Mango 21 Cool Zing 102
Step2: Cool Bite Legal 88 54 Mango 21 Zing 102 98
Step3: Legal Cool Bite 54 Mango 21 Zing102 98 88
Step4: Mango Legal Cool Bite 21 Zing 102 98 88 54
Step5: Zing Mango Legal Cool Bite102 98 88 54 21
This is the final arrangement and step 5 is the last step for this input. As per the rules followed in the above steps, find out in each of the following questions the appropriate steps for the given input.
Input for the questions.
Input: Kite 19 54 Give 31 Right 72 87 Dream Ace.

41. In step-3, what is position of 'Ace' from the left end?
(a) Third (b) Fifth (c) Second
(d) Sixth (e) First

42. In step-5, how many Letters/Numbers are between Dream and 72?
(a) Five (b) Two (c) Four
(d) Six (e) Three

43. 'Kite Give Dream Ace Right 87 72 54 31 19' in which of the following step?
(a) Step-2 (b) Step-4 (c) Step-5
(d) There is no such Step
(e) Step-3

44. In Step-2, which of the following letter/number is 5th right of Kite?
(a) 31 (b)Give (c)Right
(d) 87 (e) 54

45. How many steps would be needed to complete the arrangement?
(a) Four (b) Two (c) Seven
(d) Six (e) Five

Directions (46-50): Study the following information carefully and answer the questions given below:
P, Q, R, S, T and V are six students studying in a class. Each of them has a different height and weight. The tallest is not the heaviest. T is taller than only P but lighter than R. Q is taller than S and P and heavier than only T and V. P is lighter than only S. T is heavier than V. S is taller than V and Q is not the tallest.

46. How many of them are heavier than T?
(a) One (b) Two
(c) Three (d) Five
(e) None of these

47. How many of them are shorter than Q?
(a) Two (b) Four
(c) Three (d) Five
(e) None of these

48. Who among them is the tallest?
(a) V (b) P
(c) T (d) R
(e) None of these

49. Who, among them is third from top if arranged in descending order of height?
(a) Q (b) V
(c) S (d) Data inadequate
(e) None of these

50. Who among them is the lightest?
(a) V (b) T
(c) P (d) R
(e) None of these

QUANTITATIVE APTITUDE

Directions (51-55): What will come in place of the question mark (?) in the following number series?

51. 7 151 223 259 277 ?
(a) 268 (b) 295 (c) 286
(d) 259 (e) None of these

52. 27 30.2 23.8 33.4 20.6 ?
(a) 30.2 (b) 36.6 (c) 39.8
(d) 17.4 (e) None of these

53. 5 4 6 15 56 ?
(a) 280 (b) 275 (c) 270
(d) 265 (e) 285

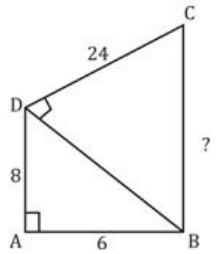
54. 7 10 21 52 121 ?
(a) 256 (b) 270 (c) 254
(d) 252 (e) None of these ∘

55. 5 3 4 ? 38
(a) 8.5 (b) 6 (c) 7.5
(d) 8 (e) 10

56. Distance between A and B is 24 km a boat travels from A to B and comes back in 6 hour. The speed of boat in still water is thrice the speed of stream. Find the speed of boat.
(a) 3 km/hr (b) 11 km/hr (c) 7 km/hr
(d) 12 km/hr (e) 9 km/hr

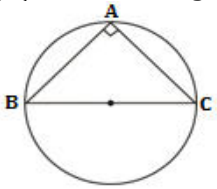
57. A rectangular grassy plot is 112 m by 78 m. It has a gravel path 2.5 m wide all round it on the inside. Find the cost of area of the path which has the cost of constructing it at Rs. 2 per square metre?
(a) Rs. 1500 (b) Rs. 1600 (c) Rs. 1750
(d) Rs. 1850 (e) None of these

58. Find length of BC ? ∠ CDB= ∠ DAB=90°



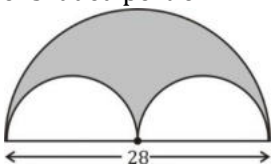
(a) 24 (b) 26 (c) 22
(d) 28 (e) 27

59. Circumference of circle is 44 meter. Find the area of triangle ?(in m^2) (Given- one angle of triangle is 45°)



(a) 49 (b) $49\sqrt{2}$ (c) $98\sqrt{2}$
(d) 98 (e) None of these

60. Find the area of shaded portion ?



(a) 154 (b) 196 (c) 156
(d) 198 (e) None of these

61. A bag contains 4 red, 5 yellow and 6 green balls. 3 balls are drawn randomly.
What is the probability that the balls drawn contain no yellow ball?
(a) $\frac{24}{91}$ (b) $\frac{33}{91}$ (c) $\frac{12}{65}$
(d) $\frac{17}{182}$ (e) None of these

Directions (62 – 66) : In each of these questions, two equations (I) and (II) are given. You have to solve both the equations and give answer.
(a) if $x > y$ (b) if $x \geq y$ (c) if $x < y$
(d) if $x \leq y$
(e) if $x = y$ or no relation can be established between 'x' and y.

62. I. $4x + 7y = 42$ II. $3x - 11y = -1$

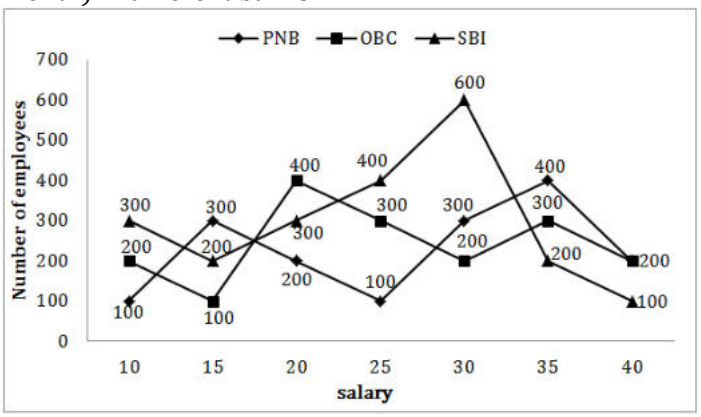
63. I. $9x^2 - 29x + 22 = 0$ II. $y^2 - 7y + 12 = 0$

64. I. $3x^2 - 4x - 32 = 0$ II. $2y^2 - 17y + 36 = 0$

65. I. $3x^2 - 19x - 14 = 0$ II. $2y^2 + 5y + 3 = 0$

66. I. $x^2 + 14x + 49 = 0$ II. $y^2 + 9y = 0$

Directions (67-71): Read the following graph carefully and answer the questions given below.
Number of employees and their salaries (in thousands per month) in different banks.



67. What is the average salary of employees of PNB?
(a) Rs. 26125 (b) Rs. 24525
(c) Rs. 23186 (d) Rs. 25625
(e) None of these

68. Which bank has the lowest number of employees?
(a) SBI (b) PNB (c) OBC
(d) PNB and OBC (e) None of these

69. What is the respective ratio between the total salary of Rs. 15000 salaried employees to the total salary of Rs. 35000 salaried employees?
(a) 1 : 3 (b) 2 : 3 (c) 1 : 1
(d) 4 : 1 (e) 2 : 7

70. The number of employees of OBC drawing salary Rs. 20000 is approximately what percent of the number of employees of SBI drawing salary Rs. 30000 month?
(a) 75% (b) $33\frac{1}{2}$ (c) $16\frac{2}{3}$
(d) 80% (e) $66\frac{2}{3}$%

71. Total salary of Rs. 20000 salaried employees is what percent of the total salary of 25000 salaried employees?
(a) 92 (b) 90 (c) 94
(d) 86 (e) None of these

Directions (72-76): Study the table carefully to answer the questions that follow.
Number of animals in grasslands of four different countries in five different years

Year	Country											
	South Africa			China			Sri Lanka			England		
	Tiger	Lion	Bear	Tiger	Lion	Bear	Tiger	Lion	Bear	Tiger	Lion	Bear
1990	145	156	250	320	346	436	280	468	255	423	342	234
1995	134	165	354	445	256	542	354	354	343	368	136	345
2000	120	135	324	583	325	454	433	345	545	354	267	456
2005	110	184	285	466	475	322	343	324	546	562	235	567
2010	160	224	264	411	535	534	535	532	453	349	345	324

72. What is the average of the number of tigers in the grassland of Sri Lanka over all the years together?
(a) 386 (b) 389 (c) 369
(d) 276 (e) None of these

73. What is the difference between the total number of lions and bears in the grassland of England in the year 2005 and the number of tigers in the grassland of South Africa in the year 1995?
(a) 597 (b) 558 (c) 677
(d) 668 (e) None of these

74. The total number of animals together in the grassland of China in the year 1990 is approximately what per cent of the total number of bears in the grassland of Sri Lanka over all the years together?
(a) 44% (b) 56% (c) 41%
(d) 47% (e) 51%

75. If 35 per cent of the total number of animals in the grassland of China in the year 2010 died due to an epidemic, how many animals remained in the grassland of China in the year 2010?
(a) 976 (b) 952 (c) 986
(d) 962 (e) None of these

76. What is three-fourths of the total number of lions in the grasslands of all the four countries in the year 2000?
(a) 848 (b) 868 (c) 804
(d) 824 (e) None of these

77. The salaries of A, B and C are in the ratio 1 : 3 : 4. If the salaries are increased by 5%, 10% and 15% respectively, then the increased salaries will be in the ratio
(a) 20 : 66 : 95 (b) 21 : 66 : 95
(c) 21 : 66 : 92 (d) 19 : 66 : 92
(e) None of these

78. Two pipes A and B can separately fill a cistern in 60 minutes and 75 minutes respectively. There is a third pipe in the bottom of the cistern to empty it. If all the three pipes are simultaneously opened, then the cistern is full in 50 minutes. In how much time, the third pipe alone can empty the cistern?
(a) 90minutes (b) 100 minutes (c)110 minutes
(d) 120 minutes (e) None of these

Directions (79-83): Each question below is followed by two statements I and II. You have to determine whether the data given in the statement is sufficient to answer the question. You should use the data and your knowledge of Mathematics to choose between the possible answers. Give answer—
(a) If the question can be answered by using statement I alone but cannot be answered by statement II alone.
(b) If the question can be answered by using statement II alone but cannot be answered by statement I alone.
(c) If both statements I and II together are required to answer the question.
(d) If the answer can be found by using any of the two statements alone.
(e) If both the statements together are not sufficient to answer the question.

79. What will be the cost of painting a rectangular wall?
I. Cost of painting is Rs 10 per square meter.
II. Perimeter of wall is 60 m.

80. Age of A is one third of age of B. What are their ages?
I. After 10 years the ratio between age of A and B will 3 : 7.
II. 10 years ago the ratio of their ages was 1 : 5.

81. What is the length of a train?
I. It takes 8 seconds to cross a man.
II. It takes 20 seconds to cross a 50-meter-long bridge with the same speed.

82. What is sum of two numbers a and b?
I. $a - z = 20$
II. $z - b = 20$

83. What is the age of A and B?
I. Age of A is 80% of the age of C.
II. Age of B is 60% of the age of C

84. The ages of Ranjana and Rakhi are in the ratio of 15 : 17 respectively. After 6 years, the ratio of their ages will be 9 : 10. What will be the age of Ranjana after 6 years?
(a) 40 years (b) 30 years (c) 34 years
(d) 36 years (e) None of these

85. The simple interest accrued on an amount of Rs. 20000 at the end of 3 years is Rs. 7200. What would be the compound interest accrued on the same amount at the same rate in the same period?
(a) Rs. 8342.36 (b) Rs. 8098.56
(c) Rs. 8246.16 (d) Rs. 8112.86
(e) None of these

86. A pipe can empty a tank in 40 minutes. A second pipe with diameter twice as that of the first is also attached with the tank to empty it. The two together can empty the tank in ;
(a) 8 minutes (b) $13\frac{1}{3}$minutes
(c) 30 minutes (d) 38 minutes
(e) None of these

87. A shopkeeper purchased a TV for Rs. 2,000 and a radio for Rs. 750. He sells the TV at a profit of 20% and the radio at a loss of 5%. The total loss or gain is
(a) Gain Rs. 352.50 (b) Gain Rs. 362.50
(c) Loss Rs. 332 (d) Loss Rs. 300
(e) None of these

88. 8 men and 4 women together can complete a piece of work in 6 days. Work done by a man in one day is double the work done by a woman in one day. If 8 men and 4 women started working and after 2 days, 4 men left and 4 new women joined. In how many more days will the work be completed?
(a) 5 days (b) 8 days (c) 6 days
(d) 4 days (e) 9 days

89. A, B and C started a business with their investments in the ratio 1 : 2 : 4. After 6 month A invested the half amount more as before and B invested same the amount as before while C withdrew $\frac{1}{4}$ th of his investment. Find the ratio of their profits at the end of the year.
(a) 5 : 12 : 13 (b) 5 : 11 : 14
(c) 5 : 12 : 14 (d) 5 : 12 : 10
(e) None of these

90. Richa's science test consist of 85 questions from three sections- i.e. A, B and C. 10 questions from section A, 30 questions from section B and 45 question from section C. Although, she answered 70% of section A, 50% of section B and 60% of section C correctly. She did not pass the test because she got less than 60% of the total marks. How many more questions she would have to answer correctly to earn 60% of the marks which is passing grade?
(a) 4 (b) 2 (c) 5
(d) 6 (e) 8

91. The average age of 28 men is 27 years. If the age of one more man is added to it, the average increases by 1 year. What is the age of the new man?
(a) 28 years (b) 42 years
(c) 56 years (d) 54 years
(e) None of these

92. Ms Deepti Jain invests 11% of her monthly salary, i.e., Rs. 5236 in Fixed Deposits. Later she invests 19% of her monthly salary on Life Insurance Policies, also she invests another 7% of her monthly salary on Mutual Funds. What is the total annual amount invested by Ms Deepti Jain?
(a) Rs. 21134 (b) Rs. 17612 (c) Rs. 10567
(d) Rs. 35224 (e) None of these

93. A committee of 3 members is to be selected out of 3 men and 2 women. What is the probability that the committee has atleast one woman?
(a) $\frac{1}{10}$ (b) $\frac{9}{20}$ (c) $\frac{9}{10}$
(d) $\frac{1}{20}$ (e) None of these

94. A and B together can complete a piece of work in 12 days. A alone can complete in 20 days. If B does the work only half a day daily, then in how many days A and B together will complete the work?
(a) 10 days (b) 20 days (c) 11 days
(d) 15 days (e) None of these

95. A train is moving at a speed of 132 km/hour. If the length of the train is 110 metres, how long will it take to cross a railway platform 165 metres long?
(a) 5 second (b) 7.5 second (c) 10 second
(d) 15 second (e) 9 second

96. 15 litres of a mixture contains alcohol and water in the ratio 1 : 4. If 3 litres of water is mixed in it, the percentage of alcohol in the new mixture will be
(a) 15 (b) $16\frac{2}{3}$ (c) 17
(d) $18\frac{1}{2}$ (e) None of these

97. Two pipes A and B can fill a cistern in 30 minutes and 45 minutes respectively. Both pipes are opened. The cistern will be filled in just 20 min, if the pipe B is turned off after
(a). 5 min (b). 9 min (c). 10 min
(d). 15 min (e). None of these

98. 2 men and 3 boys can do a piece of work in 10 days while 3 men and 2 boys can do the same piece of work in 8 days. In how many days can 2 men and 1 boy do the same piece of work?
(a) $12\frac{1}{2}$ days (b) 24 days (c) 32 days
(d) $11\frac{1}{2}$ days (e) None of these

99. A man sets out on cycle from Delhi to Faridabad, and at the same time another man starts from Faridabad on cycle for Delhi. After passing each other they complete their journeys in $2\frac{6}{7}$ and $5\frac{3}{5}$ hours respectively. At what rate does the second man cycle if the first man cycles at 14 kmph?
(a) 10 kmph (b) 5 kmph (c) 7 kmph
(d) 8 kmph (e) None of these

100. The length of rectangular floor is twice its breadth. If Rs 256 is required to paint the floor at the rate Rs 2 per sq m, then what would be the length of floor?
(a) 16 m (b) 8 m (c) 12 m
(d) 32 m (e) 20 m

ENGLISH LANGUAGE

Directions (101–108): Read the following passage carefully and answers the questions given below it. Certain words are given in bold to help you locate them while answering some of the questions

There is no fool so great a fool as a knowing fool. But to know how to use knowledge is to have wisdom." Businesses continue to face challenging times. In this uncertainty, some leaders have lost their way due to **egregious** moral and ethical missteps. Others have reached career dead ends due to their inability to see the big picture from a higher not-so-common perspective. Many of these leaders are undoubtedly intelligent. But they're not wise.

Our minds work on a lower and higher level. The lower level deals with the concrete - our immediate physical environment, information, facts and logic. Our lower mind supports us to be aware, conceptual and reflective. Our lower mind is rational, analytical, opinionated, busy and often sceptical. It is bound by time and space. We use our lower mind to make sense of our complicated and emotional world. The lower mind is the stuff of business schools, "operations-focused" education and experiential learning. The lower mind delivers reductionist thinking and mechanistic, **conventional** approaches to life. The main drawback of living in the lower mind is that it only reflects your internal map of reality. It is like being stuck in your own intellectual zip code, never moving beyond your nine-digit thoughts, beliefs, assumptions, expectations and world views. It is like living in one town, knowing it completely, and never venturing outside the borders of that town. Intelligent people are generally engaged with their lower mind and left-brain thinking. The lower mind focuses on one corner of the painting. Wisdom does not arise from this place. The higher mind considers the abstract. It involves intuition, aspiration, heart, soul and spirit and connects

with the Universal mind, with Universal truth, with beauty and with goodness. Our higher mind speaks in the language of ideas, ideals, symbols, principles and impulses. It is loving. It guides us to the truth.

The higher mind sees the threads woven between the mental, physical, emotional, spiritual, psychological and social aspects of our life. The higher mind sees the entire painting - the place from which wisdom arises. Wise leaders access both their lower and higher minds. Wise leaders understand they are spiritual beings living in a human form. They allow their lower minds to access their higher, helping them to access intuition and impressions that provide insights into the bigger picture of life. Wise leaders understand the importance of focus, presence, self-discipline, meditation, study, loving service and creative expression. They seek to grasp the next higher level of awareness. They venture outside their historical map of reality - willing to jettison their old, "safe" beliefs, assumptions, expectations and worldviews - to explore the possible and the unknown. They're open to knowing what they don't know. Wise leaders understand that spiritual and personal growth means connecting with higher concepts and energies, be they values, ideas, ideals, potentials, archetypes, higher guidance or intuition. The wise leader develops the capacity to not only connect with these higher concepts, but also to seek to ground them into forms, tasks, projects, relationships and details that inform the way they lead.

Wise leaders don't stop with experience, but transcend experience - both their own and others' - in a way that they spend an appreciative amount of time and energy in deep self-reflection and thoughtful consideration around their experience, leading to higher insights, enhanced value and a deeper sense of self-awareness. Proust Wise leadership is not about having experiences but consciously learning from those experiences. The process of learning from experience leads to a process of inquiry - looking with curiosity, not judgment, into the who, what, when, where, how and - most importantly - the why of their experiences. Inquiry is a matter of punctuation; it's about question marks, not full stops. It is about curiosity. Wise leaders understand how connections between diverse elements can create something new. They are adept at using analogy and metaphor and seek to recognize patterns, spot trends, draw connections and **discern** the big picture even when there seem to be nothing there. A wise leader interacts with her world in terms of a richer and more varied spectrum of possibilities and opportunities. A wise leader understands the importance of relationships - human and otherwise. A wise leader is a systems thinker, a gestalt thinker, a holistic thinker. Wise leaders are comfortable being oriented to their right brain, as well as to their heart and soul. Inquiry, for the wise leader, is not about "futurizing the past" - using their past experiences, the known, the tried and true - to explain present experiences that are un-common, un-usual, un-familiar. They understand that inquiry involves delving deeply into the self, even parts of the self that, heretofore, might have been unknown, in order to search for new insights, **perspectives** and understanding - seeking familiarity with the unknown. For wise leaders, inquiry means creating an internal space unencumbered by old thoughts, beliefs and premises - a new, clear, inviting and open space - entering into a fresh realm without preconception or expectation and being informed with new learning, new sense, new meaning, new WHYs and new HOWs. In other words, new wisdom.

101. Which of the following is true regarding wisdom?
(a) People with wisdom are sceptical and opinionated.
(b) People with Wisdom have conventional approach to life.
(c) Wisdom is what's left after we've run out of personal opinions.
(d) The abilities to plan or create an idea, solve a problem, be logical in your creativity and make favorable results in a bad situation.
(e) All of these.

102. Which of the following is false in context of the passage?
(1) Lower mind lacks emotional and spiritual intelligence.
(2) For wise leader inquiry means new wisdom.
(3) People who lack wisdom but are intelligent don't have access to higher mind.
(a) Only 1.
(b) Both (1) and (2)
(c) Both (3) and (1).
(d) only (3)
(e) None of these.

103. What is the main drawback(s) of living only in the lower mind?
(a) Person is unable to have a conventional approach to life.
(b) Person is opinionated and sceptical.
(c) Never been able to transcend beyond our beliefs and assumption.
(d) People stop having experiences.
(e) Not able to understand the importance of relationships.

104. What is the difference between intelligence and wisdom?
(a) People with wisdom don't have rational thinking.
(b) Intelligent people are not reflective.
(c) People with wisdom have access to both the minds.
(d) People with wisdom never make mistakes.
(e) People with wisdom are not sceptical unlike the one who are intelligent.

Directions (105-106): Which of the following words is nearest in the meaning to words as given in bold letters?

105. EGGREGIOUS

(a) Imperceptible (b) Conspicuous
(c) Conceal (d) Trivial
(e) Trifling

106. CONVENTIONAL

(a) Distinctive (b) Orthodox
(c) Complex (d) Inept
(e) Original

Directions (107-108): Which of the following words is most opposite in the meaning to words as given in bold letters?

107. DISCERN

(a) Perceive (b) Detect (c) Recognize
(d) Confound (e) Behold

108. PERSEPECTIVE

(a) Panorama (b) Prospect (c) Aspect
(d) Stance (e) Blindness

Directions (109 –116): Read the following passage carefully and answers the questions given below it. Certain words are given in bold to help you locate them while answering some of the questions

This is a problem that society must fix; we are supposed to be an equal education system. It is Hispanic and black students who aren't performing at the level of white and Asian students. Certain races or groups shouldn't be the only ones successful in school.

According to the interview with Greg Duncan and Richard Murnane, Rohan Mascarenhas stated that, one of the reasons why children achieve good grades in school is because they are in after-school programs. Parents with higher income sign their kids up for the after school. They do this so that their child can learn more throughout the day not just in school. After-school programs also help children one on one, who are struggling in school. The rich take advantage of these after school programs. The students with low-income struggle with their reading and writing, they can't afford to go to after-school programs. This is why they continue to struggle and don't receive the proper help that they need.

When I was in elementary school I attended after-school, which helped me because it kept me in honors class. I was able to get the extra help I needed during this time and improved my academic performance. Its important to attended after-school because it focuses on academic activities. Parents with higher income pay for tutors to come over and teach their child. While low income parents don't reach out to any tutors. If students with lower income could receive some money from the government to help them pay for after schools and tutors, it would help them to perform better and succeed in school as well. The government can help if they make after school programs free for any student. The more students to join after- schools, the better results they will have in test scores in school.

Would you send your child to a Public or a Private school? Which would your income lead you to? Most high-income parents put their child in private schools; its class size is smaller than public schools. Public school classes ranges from 25 to 30 students. That's too many students for one teacher to handle. One of the benefits of private school is that class size is from 15 to 20 students. This allows students to receive more attention in class, and receive more work as well. The level of teaching is different between the two. Private school teachers often have their graduate degree or their **doctrine** degree, while public school teachers must have a bachelor's degree with a master in their subject. The level of education however, is more difficult for private than for public school. Parents with low income tend to put their child in public schools because it's free. Help from the government is what makes public schools run well and not shut down. Private schools charge tuition for each student, so this helps them raise enough money and not rely so much for government funds.

There is a gap in achievement between low-income students and high-income students. Students who come from **affluent** families perform higher in school compared to lower income families. About 82 percent of high school graduates who come from high-income families attend colleges, in comparison to 52 percent of graduates from low-income families. A study shown by Martha Bailey and Susan Dyhorski showed that over the last 20 years the percent of children from higher income who completed college increased by 21 percent, while low income increased by only 4 percent. This is not a significant change for low-income students, showing that this is a cycle.

Study show that this cycle continues and stays with the student into college. The rate of White graduates who were college ready in English was 77 percent, whereas African American was half of that, they were 35 percent ready. This is because students who come from families with low-income are attending high schools with teachers who are inexperienced and that do not offer the courses needed to prep them for college. These schools lack the resources they need to ensure their students are ready for higher education. The percent of 18-24 year olds **enrolled** in college is 58 percent, while Hispanic is less than half of that at 19 percent and black at 14 percent.

The income gap has not **narrowed** over time. Changes within the government and education system need to be made to close this gap in schools. It is essential to increase academic achievement. All students should be held to the same high expectations and all be given the same resources and tools to help them through K-12 grade. This will prepare them for their college and future careers.

109. Which one of the following is/are the reason(s) why students with higher income succeed more than those with low income?
(1) Poor students don't go to after school programs because they can't afford it unlike the rich students.
(2) As poor students go to public schools.
(3) Different level of education.
(a) Only (1)
(b) Both (1) and (2).
(c) Only (2)
(d) Both (1) and (3)
(e) All of these.

110. What can be the most suitable title for the passage?
(a) Dilemma of low income students.
(b) 'Education' only for rich.
(c) The widening gap between rich and poor.
(d) Education and Inequality between Rich and Poor.
(e) Need for reforming education system.

111. How the gap between rich and poor students can be abridged?
(a) By increasing the number of public schools.
(b) By waiving the fees of private sector schools.
(c) By narrowing the income gap.
(d) By encouraging poor students to join after school programs.
(e) By reducing the class size in public schools.

112. Which of the following is false in context of the passage?
(a) Black students are not performing better than the Asian students.
(b) Not being able to reach out to tutor is one of the reasons for bad performance of poor people.
(c) More attention to students is paid in private compared to public.
(d) Private sector teachers are more qualified hence the performance is better.
(e) Number of students are too much to handle in public school.

Directions (113-114): Which of the following words is nearest in the meaning to words as given in bold letters?

113. AFFLUENT
(a) Penurious (b) Impecunious (c) Destitute
(d) Deprived (e) Opulent

114. NARROWED
(a) Wide (b) Broad (c) Spacious
(d) Capacious (e) Constricted

Directions (115-116): Which of the following words is farthest in the meaning to words as given in bold letters?

115. DOCTRINE
(a) Creed (b) Dogma (c) Belief
(d) Conviction (e) Scepticism

116. ENROLLED
(a) Catalogue (b) Directory (c) Expatriate
(d) Avow (e) Volunteer

Directions: (117-121): In these questions, a sentence or a part of sentence is underlined. Below are given alternatives to the underlined part which may **improve the sentence**.

117. In order to <u>earning decent living,</u> we need to have a good job which pays substantial amount of money
(a) earned decency life (b) earning decency live
(c) earn a decent living (d) earned decently life
(e) No correction required

118. As the layer was too personally involved, the judge decided to <u>removed him from the</u> case.
(a) remove himself from the
(b) removes him from the
(c) remove him from the
(d) remove him on the
(e) No correction required

119. Once the event is over, many people claim credit <u>for success and disowning</u> the responsibility for failure.
(a) of success and disowning
(b) for success but disowning
(c) for success but disown
(d) for success while disowned
(e) No correction required

120. To practice any art properly <u>require extra ordinarily patience</u> especially at the beginning.
(a) Required extraordinarily patience
(b) Requires extraordinary patience
(c) Requiring extraordinary patience
(d) Requiring extraordinarily patience
(e) No correction required

121. <u>If he was to decide to go to college</u>, I for one, would recommend that he went to Yale University.
(a) If he were to decide to go to college
(b) had he decide to go to college
(c) In the event that he decides to go to college
(d) Supposing he was, to decide to go to college
(e) No correction required.

Directions (122-126): The Following questions have two blanks, each blank indicating that something has been omitted. Choose the set of words for each blank that best fits the meaning of the sentence as a whole.

122. As many as fifteen people had _____ me at the security check when I was travelling from Delhi _____ San Francisco.
(a) Approached, to
(b) Apprehended, from
(c) Accosted, to
(d) Assumed, from
(e) None of these

123. People avoid eating non-vegetarian food _____ there is excess protein and fat that may be _____ for a good health.
(a)because ,pernicious
(b)as,counter-productive
(c)since ,harmful
(d) notwithstanding, harmful
(e) None of these

124. Indian economy has seen many _____ but this one will surely sound the death _____ for us.
(a) downswings , bed (b) downturns , knell
(c) fluctuations , alarm (d) aberrations, siren
(e) None of these.

125. I was lucky to have _____ the plane crash and come out _____.
(a) survived , non-injured
(b) lived , squeamishly
(c) survived , unscathed
(d) lived through , unpetulant
(e) None of these.

126. It is a given that Japan would stem its economic _____ by doling ____ largesse to its people.
(a) downslide , in (b) downturn , out
(c) slide , up (d) slowdown , after
(e) None of these

Directions (127-136): In the following passage there are blanks, each of which has been numbered. These numbers are printed below the passage and against each, five words suggested, one of which fits the blank appropriately. Find out the appropriate word in each case.
Seed quality is an..(**127**)..aspect of crop production. For ages, farmers have traditionally been selecting and..(**128**)..good quality seed, since it was in their interest to do so. They knew and understood the importance of quality seed in production.
However, with the advent of green revolution technology, based..(**129**)..on high-yielding dwarf varieties of wheat and rice, mainstream thinking changed. Agricultural scientists, for reasons that remain..(**130**)..,began to doubt, the ability of farmers to maintain seed quality..(**131**)… Aided by the World bank, the ministry of agriculture launched of national seeds project in 1967. Under the project, spread into three phases, seed processing plants were..(**132**)..up in nine states. Six states were covered under phase three. All the huge processing plants were..(**133**)..to do was to provide 'certified' seeds of food crops, mainly self-pollinating crops, to farmers. In mid-1980s, the International Rice Research Institute (IRRI) in the philippines concluded a study which..(**134**)..that there was hardly any difference in the crop yields from transplanted rice and form the crop shown by broadcasted seeds. one would wonder why, in the first instance, were the, farmers, asked to..(**135**)..over to transplanting paddy? The answer is simple-probably, to help the mechanical industries grow. since rice, is the staple food in Asia, tractor sales could any grow if there was a way to move the machine in the rice fields. No wonder, the sales of tractors, puddlers, reapers and other associated..(**136**)..soared in the rice growing areas.

127. (a)Irrational (b) main (c) brilliant
(d) important (e) empathetic

128. (a)maintaining (b) trusting (c) selling
(d) processing (e) creating

129. (a) necessarily (b) exceptionally (c) primarily
(d) regularly (e) truly

130. (a) unexplained (b) doubt (c) some
(d) true (e) sad

131. (a)himself (b) sometimes (c) proper
(d) improve (e) themselves

132. (a) established (b) created (c) set
(d) wound (e) thought

133. (a) tried (b) mattered (c) meaning
(d) supposed (e) expect

134. (a) renounced (b) showed (c) meaning
(d) supposed (e) expect

135. (a) shift (b) make (c) turn
(d) mull (e) switch

136. (a) sell (b) equipment (c) people
(d) technique (e) creatures

Directions (137-140): Rearrange the following seven sentences (A), (B), (C), (D), (E), (F) and (G) in the proper sequence to form a meaningful paragraph; then answer the questions given below them:

A. However, achieving success is often preceded with frustration and sometimes learning to accept one's weaknesses as will as celebrating and building on strengths.
B. While toddlers and preschoolers need constant supervision, school age children become gradually ready for more independence.
C. Watching them try new activities, cheering them on at athletic events and applauding their accomplishments at recitals are usually some of the high points for most parents.
D. When will equipped parents can be excellent coaches for their child no matter what the endeavor.
E. Raising school age children can be awesome.
F. However, learning to make good choices and exercise self-discipline does not come easily for many.
G. Parents need to impart a moral code that the child gradually internalizes.

137. Which of the following should be the SECOND sentence after the rearrangement?
(a) A (b) B (c) C
(d) D (e) E

138. Which of the following should be the FIRST sentence after the rearrangement?
(a) A (b) C (c) B
(d) G (e) E

139. Which of the following should be the FIFTH sentence after the rearrangement?
(a) E (b) D (c) B
(d) F (e) A

140. Which of the following should be the FOURTH sentence after the rearrangement?
(a) A (b) B (c) C
(d) F (e) D

Solutions

REASONING ABILITY

Direction (1-5):

Floor	Person	Color
8	U	Pink
7	Y	Grey
6	S	Yellow
5	Z	Blue
4	T	Purple
3	V	Orange
2	X	Green
1	W	Red

1. (c); 2. (d); 3. (a);
4. (a); 5. (c);

Direction (6-10):

L F G M N H E O —— Facing North

6. (e); 7. (b); 8. (c);
9. (c); 10. (c);

Direction (11-15) :

11. (b); Since the first letter is vowel and the last letter is consonant, so both are to be coded as code of consonant i.e. of B which is *.

12. (c); Since first and last letters are consonants and in between there are two vowels, so both the vowels are to be coded as 8. So the code is7$8882.

13. (e); Explanation:
Converting the letters into symbols the code is,
D K P R T B
% 6 5 2 $ *

14. (d); Explanation:
Since 1st and last letters are vowels, so both are to be coded as +. So the code is +5#$2+

15. (a); Explanation:
Since 1st letter is a consonant and last is a vowel, so their codes are to be interchanged. So the code for HLEKBI is 13@6*9.

Direction (16-20): Will → ka
Meet → ja
Us → lu
You → hu
Today → la
temperature → ju
the → fu
of → na
maximum → fa

16. (b); 17. (a); 18. (b);
19. (b); 20. (c);

Direction (21-25): © → <
@ → ≤
% → >
$ → ≥
★ → =

21. (a); $B < T = M > F$
B<M (True) B<F (False)

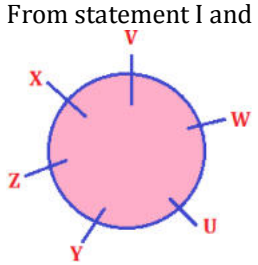
22. (b); $M = R > T \geq K$
K≤ M(False) K<M(True)

23. (e); $W < D \leq H = N$
N≥ $D(True)$ W<N(True)

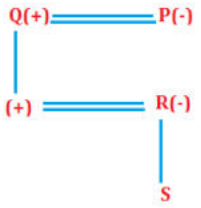
24. (d); $W \leq D \geq R < K$
R=W(False) R>W(False)

25. (d); $F \geq J > V < N$
N≥ $F(False)$ N>J(False)

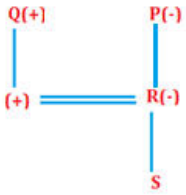
26. (e); From statement I and II both :



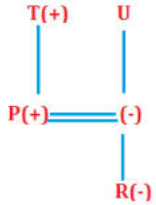
27. (b); **From I:** P is mother in law of R. or mother of R.



or



From II: P is father of R.



28. (d);

29. (a);

30. (b); Total 37 persons sitting in a row.

Direction (31-35):

Boys	USPRQT
Girls	FEADBC

31. (e); **32. (b);** **33. (c);**

34. (e); **35. (a);**

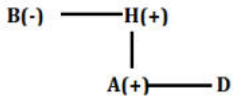
Direction (36-37):

36. (a)

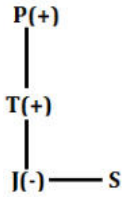
37. (d); 16+8+0+2+1=27

Direction (38-40):

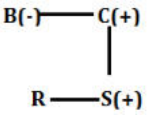
38. (b);



39. (d);



40. (e);



Direction (41-45):

Input: Kite 19 54 Give 31 Right 72 87 Dream Ace.

Step1: Ace Kite 19 54 Give 31 Right 72 Dream 87.
Step2: Dream Ace Kite 19 54 Give 31 Right 87 72.
Step3: Give Dream Ace Kite 19 31 Right 87 72 54.
Step4: Kite Give Dream Ace 19 Right 87 72 54 31.
Step5: Right Kite Give Dream Ace 87 72 54 31 19.
'Step-5' is the final step of this input.

41. (a); **42. (b);** **43. (d);**

44. (c); **45. (e);**

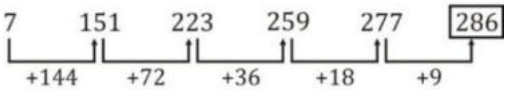
Direction (46-50): Height→ R>Q>S>V>T>P
Weight→ S>P>R>Q>T>V

46. (e); **47. (b);** **48. (d);**

49. (c); **50. (a);**

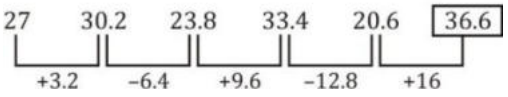
QUANTITATIVE APTITUDE

51. (c); Pattern is —



∴ ? = 286

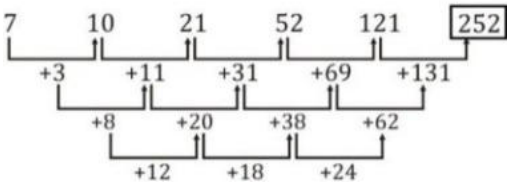
52. (b);



∴ ? = 36.6

53. (b); Pattern is
5 × 1 – 1 = 4
4 × 2 – 2 = 6
6 × 3 – 3 = 15
15 × 4 – 4 = 56
56 × 5 – 5 = 275

54. (d); Pattern is —

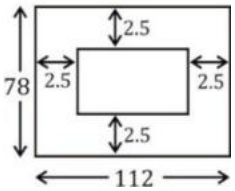


∴ ? = 252

55. (e); Pattern is,
5 × 1 – 2 = 3
3 × 2 – 2 = 4
4 × 3 – 2 = 10
10 × 4 – 2 = 38 ⇒ ? = 10

56. (e); Let speed of stream be x km/hr.
∴ speed of boat in still water is 3x km/hr
∴ ATQ,
$\frac{24}{3x+x}+\frac{24}{3x-x}=6$
$\frac{24}{4x}+\frac{24}{2x}=6 \Rightarrow \frac{6}{x}+\frac{12}{x}=6$
$x=\frac{18}{6}=3\,km/hr$
∴ Speed of boat in still water = 9 km/hr

57. (d);



$\therefore$ $Required\ cost = [112 \times 78 - 107 \times 73] \times 2$
$= Rs.\ 1850$

58. (b); Length of BD by pythagores theorem
$BD = \sqrt{8^2+6^2}$
$= \sqrt{64+36} = 10$
∴ Length of BC
$= \sqrt{(24)^2+(10)^2}$
$= \sqrt{576+100}$
$= \sqrt{676}$
$= 26$

59. (a); Let radius of circle be r meter
∴ $2\pi r = 44$
$2 \times \frac{22}{7} \times r = 44$
r = 7cm
∴ BC = 14 m
∴ AB = AC = $7\sqrt{2}$ m
∴ Area of ΔABC
$= \frac{1}{2} \times 7\sqrt{2} \times 7\sqrt{2} = 49\ m^2$

60. (a); Radius of bigger semicircle = 14
& radius of smaller semicircle = 7
∴ Required area
$= \frac{1}{2}[\pi(14)^2 - 2 \times \pi(7)^2]$
$= \frac{1}{2}[196\pi - 98\pi]$
$= \frac{1}{2} \times 98\pi = 154$

61. (a); There are four cases → 3R, (1R, 2G), (2R, 1G), 3G
∴ Required probability
$= \frac{{}^4C_3+{}^4C_1\times{}^6C_2+{}^4C_2\times{}^6C_1+{}^6C_3}{{}^{15}C_3}$
$= \frac{4+4\times15+6\times6+20}{91\times5}$
$= \frac{4+60+36+20}{91\times5}$
$= \frac{120}{91\times5} = \frac{24}{91}$

62. (a); 4x + 7y = 42 ...(i)
3x – 11y = – 1 ...(ii)
Multiplying (i) by 3 and (ii) by 4
12x + 21y = 126 ...(iii)
12x – 44y = – 4 ...(iv)
Solving (iii) & (iv)
x = 7 & y = 2
∴ x > y

63. (c); I. $9x^2 - 29x + 22 = 0$
$9x^2 - 18x - 11x + 22 = 0$
9x (x – 2) – 11 (x – 2) = 0
$\therefore x = 2\ or \frac{11}{9}$
II. $y^2 - 7y + 12 = 0$
$y^2 - 3y - 4y + 12 = 0$
y (y – 3) – 4 (y – 3) = 0
y = 3, 4
∴ y > x

64. (d); I. $3x^2 - 12x + 8x - 32 = 0$
3x (x – 4) + 8 (x – 4) = 0
$\therefore x = 4, \frac{-8}{3}$
II. $2y^2 - 17y + 36 = 0$
$2y^2 - 9y - 8y + 36 = 0$
y (2y – 9) – 4 (2y – 9) = 0
$\therefore y = 4, \frac{9}{2}$
∴ y ≥ x

65. (a); I. $3x^2 - 19x - 14 = 0$
$3x^2 - 21x + 2x - 14 = 0$
3x (x – 7) + 2 (x – 7) = 0
$\therefore x = 7\ or \frac{-2}{3}$
II. $2y^2 + 5y + 3 = 0$
$2y^2 + 2y + 3y + 3 = 0$
2y (y + 1) + 3 (y + 1) = 0
$y = -1\ or \frac{-3}{2}$
∴ x > y

66. (e); I. $x^2 + 2 \times 7 \times x + (7)^2 = 0$
$\therefore (x+7)^2 = 0$
∴ x = – 7
II. y (y + 9) = 0
∴ y = 0 or –9
∴ No relation.

67. (e); Average salary = $\frac{1000\times43000}{1600} = 26875$

68. (b); Number of employees in :
PNB = 1600
OBC = 1700
SBI = 2100

69. (e); Required ratio = 15000×600 : 35000 × 900
= 2 : 7

70. (e); Required percentage = $\frac{400}{600} \times 100$
= $66\frac{2}{3}\%$

71. (b); Required percentage = $\frac{20000\times900}{25000\times800} \times 100 = 90\%$

72. (b); Required No. = $\frac{280+354+343+535+433}{5} = 389$

73. (d); Required difference = $(235 + 567) - 134 = 668$

74. (e); Required % $= \frac{320+346+436}{255+343+545+546+453} \times 100$
$= \frac{1102}{2142} \times 100 \approx 51\%$

75. (d); Required animals
$= \frac{65}{100} \times (411 + 535 + 534) = 962$

76. (c); Required No. of lions $= \frac{3}{4}(135 + 325 + 345 + 267)$
$= 804$

77. (c); Let their salaries be 100, 300 and 400
Their new salaries = 105 : 330 : 460
= 21 : 66 : 92

78. (b); Work done by the third pipe in 1 min. = (1/50) – [(1/60) + (1/75)] = [(1/50) (3/100)]
= (1/100)
∴The third pipe can alone fill the tank in 100 minutes.

79. (e); Both the statements together is not sufficient.

80. (d); Both statements alone is sufficient.
Let age of A is x and age of B is y.
∴ 3x = y ... (i)
From statement I: $\frac{x+10}{y+10} = \frac{3}{7}$ ... (ii)
Solving equations (i) and (ii), x = 20, y = 60
From statement II:
$= \frac{x-10}{y-10} = \frac{1}{5}$
=>5x – 50 = y – 10
=>5x – y = 40 (iii)
From equations (i) and (iii), x = 20, y = 60

81. (c); Let length the train be x.
From statement I:
Speed $= \frac{x}{8}$
From statement II:
Speed $= \frac{x+50}{20}$
Solving this, x $= \frac{400}{12} = \frac{100}{3}$ meter

82. (e); From I and II we find a + b = 2z
we can not find a + b from I and II together.

83. (e); Let age of A, B and C be x year, y year and z year respectively
Data is not sufficient.
From statement I:
x $= \frac{80}{100} \times z$
From statement II:
y $= \frac{60}{100} \times z$
From these two equations $\frac{x}{y} = \frac{4}{3}$ but cannot find x and y separately.

84. (d); Let the present age of Ranjana and Rakhi be 15x and 17x
$\frac{15x+6}{17x+6} = \frac{9}{10}$
x = 2
∴ Age of Ranjana after 6 years
= 15 × 2 + 6 =36 years.

85. (b); S.I. =7200
R$= \frac{S.I \times 100}{P \times T} = \frac{7200 \times 100}{20,000 \times 3} = 12\%$
C.I $= 20000[(1+\frac{12}{100})^3 - 1]$
= 8098.56

86. (a); Here volume of water emptied by the second pipe will be 4 times to that of first Hence, Time take will be 1/4 of the first pipe. When both the pipes are open the part of the tank emptied in 1 minute= 1/8 Hence the tank will be emptied in 8 minutes.

87. (b); Total CP = 2000 + 750 = 2750
Total $SP = \frac{120}{100} \times 2000 + \frac{95}{100} \times 750$
= 2400 + 712.5
= 3112.5
∴ Total gain = 3112.5 – 2750 = 362.5 Rs.

88. (a); Let Man = x
Woman = $2x$
$\therefore \frac{8}{x} + \frac{4}{2x} = \frac{1}{6}$
$\frac{20}{2x} = \frac{1}{6}$
$x = 60$
∴ Man = 60, woman = 120
Required No. of days $= \frac{\frac{2}{3}}{\frac{4}{60} + \frac{8}{120}}$
$= \frac{2 \times 120}{3(16)}$
= 5 days

89. (c); Let their investment be $x, 2x$ and $4x$
∴ A → $6x + 6 \times \left(x + \frac{x}{2}\right) = 6x + 9x = 15x$
$B \rightarrow 6 \times 2x + 6 \times 4x = 36x$
$C \rightarrow 6 \times 4x + 6 \times \left(4x - \frac{1}{4} \times 4x\right) = 24x + 18x =$ $42\,x$
∴ Required Ratio = 15 : 36 : 42
= 5 : 12 : 14

90. (b); Number of questions attempted correctly =
70% of 10 + 50% of 30 + 60% of 45
= 7 + 15 + 27 = 49
Passing grade = (60/100)* 85 = 51
Reqd. Ans = 51 - 49 = 2

91. (c); Age of new man = 28 + 28 = 56 years

92. (b); 11% → 5236
1% → 476
∴ (11 + 19 + 7) = 37% → 17612 Rs.

93. (c); Probability = $\frac{2c_1\times3c_2+2c_2\times3C_1}{5c_3}$
$= \frac{2\times3+1\times3}{10} = \frac{9}{10}$

94. (d); $B = \frac{1}{\frac{1}{12}-\frac{1}{20}} = \frac{1}{\frac{5-3}{60}}$
B = 30 days
∴ Required No. of days = $\frac{1}{\frac{1}{20}+\frac{1}{60}}$
$= \frac{60}{4} = 15$ days

95. (b); $\frac{132\times5}{18} = \frac{100+165}{t}$
$t = \frac{275\times18}{132\times5}$
t = 7.5 seconds

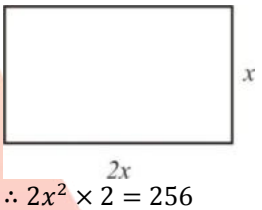
96. (b); $\frac{3x}{12x+3} = \frac{3x}{15x}$
∴ New ratio = 1 : 5
∴ Required % = $\frac{1}{6}\times100\%$
$= \frac{50}{3}\% = 16\frac{2}{3}\%$

97. (d); 3--------A--------30 \
90 \
2--------B--------45
Let B turned off after T min
2T+3× 20 = 90
T=15 min

98. (a); $(2M + 3B)10 = (3M + 2B)B$
$20M + 30B = 24M + 16B$
$2M = 7B$
∴ $10B$ = 10 days
∴ $B = \frac{1}{100}$ days
∴ $2M + 1B = 7B + B$
$= 8B$
$= \frac{8}{100} = \frac{2}{25}$
∴ Required No. of days = $12\frac{1}{2}$ days

99. (a); Ratio of their speeds = $\sqrt{\frac{28}{5}} : \sqrt{\frac{20}{7}}$
∴ $\sqrt{\frac{28}{5}} \rightarrow 14$
∴ $\sqrt{\frac{20}{7}} \rightarrow \frac{14}{\sqrt{28}}\times\sqrt{5}\times\frac{\sqrt{20}}{\sqrt{7}}$
$= \frac{14}{2\sqrt{7}}\times\sqrt{5}\times\frac{2\sqrt{5}}{\sqrt{7}} = \frac{14\times5}{7} = 10$ kmph

100. (a); Area = $2x^2$ m²



∴ $2x^2 \times 2 = 256$
$x^2 = 64$
$x = 8$
∴ Required length = 2 × 8 = 16 m

ENGLISH LANGUAGE

101. (c); 102. (e); 103. (c);
104. (c); 105. (b); 106. (b);
107. (d); 108. (e); 109. (e);
110. (d); 111. (e); 112. (d);
113. (e); 114. (e); 115. (e);
116. (c);

117. (c); 'Earn a decent living' is the only suitable syntax to be used. It means 'to earn well' that fulfils the sentence's context.

118. (c); After 'to' we should use 'V_1' to show purpose.

119. (c); 'Disowning' is the improper usage. We have to use 'disown' here so that syntax gets correct

120. (b); 'Art' is singular subject, so it should agree with a singular verb. Hence, 'requires' is suitable expression.

121. (a); To express the subjunctive mood. Auxiliary 'were' is used in the sentence.

122. (c); Accost means to approach someone with an allegation or blame, so 3rd option is the most appropriate one.

123. (c); Harmful-not good for health, so 3rd option is most appropriate one

124. (b); downturns means- a decline in economic, knell means -the sound of a bell

125. (c); survived means- continue to live or exist, unscathed means- without suffering any injury, damage, or harm.

126. (b); downturn, out "dole out" is the correct phrase which means to help someone with money and gifts.

127. (d); 128. (a); 129. (c);
130. (a); 131. (e); 132. (c);
133. (d); 134. (b); 135. (e);

136. (b); For questions (136-140) THE CORRECT SEQUENCE IS **ECADBFG**

137. (c); 138. (e); 139. (c);
140. (e);

REASONING ABILITY

1. In the word **'BRISKLY'**, how many pairs of the letters have the same number of letters between them in the word as in alphabet?
(a) Four (b) Two (c) One
(d) Three (e) More than four

Direction (2-4): Study the following information carefully and answer the questions given below:

Seven members are living in the family. Q is the daughter of P. B is the brother of R. G is the mother in law of A. B is married with A. B is the uncle of Q. D is the father of B.

2. What is the relation of B with respect to P?
(a) Brother (b) Sister in law (c) Brother in law
(d) Mother (e) Aunt

3. If C is the brother of B, then What is the relation of C with respect to Q?
(a) Aunt (b) Uncle (c) Father
(d) Mother (e) Sister

4. If P is the father of Q, then what is the relation of R with respect to P?
(a) Wife (b) Husband (c) Father
(d) Father in law (e) Mother

5. If **"624739854"** 1 is added to all the even number and 1 is subtract from all the odd number, then what is the sum of the digits which is fifth from the left end and fourth from the right end?
(a) 12 (b) 9 (c) 11
(d) 10 (e) None of these

Direction (6-10): Study the following information carefully and answer the questions given below:

Eight persons A, B, C, D, E, F, G and H are sitting around a rectangular table in such a way that four persons sit on each of the four corner of the table and other four persons sit on the middle of each side. The one who sits at the corner of table faces outside the center of table and the one who sits at the middle side of table faces towards the center of table. Persons sitting on opposite sides are exactly opposite to each other.
F sits at one of the middle side of the table. Two persons sit between F and E. Only one person sits between F and C. E does not sit near to C. Either A sits 2nd to the left of H or 2nd right of H. One person sits between A and C. B and G sit opposite to each other. D sits 2nd to the left of B. G doesn't sit next to F.

6. Four of the following five are alike in a certain way and hence they form a group. Which one of the following does not belong to that group?
(a) E (b) G (c) D
(d) H (e) B

7. Who among the following sits 3rd to the right of D?
(a) E (b) H (c) C
(d) A (e) G

8. What is the position of F with respect to G?
(a) 3rd to the right (b) 2nd to the right
(c) 2nd to the left (d) 3rd to the left
(e) None of these

9. How many persons sit between D and F when counted to the right of D?
(a) One (b) None (c) Two
(d) Three (e) Four

10. Who among the following faces to C?
(a) H (b) B (c) G
(d) E (e) None of these

Direction (11-15): Study the following information carefully and answer the questions given below:

Ten persons L, M, N, O, P, Q, R, S, T, and U were born on two different dates 15 and 30 of five different months viz. January, March, April, September and November but not necessarily in the same order.
L was born on 15th of the month which has 31 days. Three persons were born between L and P. Four persons were born between P and O. O was born before L. The number of persons were born after O is same as the number of persons born before N. One person was born between P and R. M was born before T but not in the month of January. T was born before P. U was born before S on same date.

11. How many persons were born after U?
(a) None (b) Four (c) More than five
(d) Two (e) Five

12. Four of the following five are alike in a certain way and hence they form a group. Which one of the following does not belong to that group?
(a) Q-L (b) R-P (c) O-S
(d) P-N (e) M-O

13. How many persons were born between T and N?
(a) Six (b) Four (c) Two
(d) Three (e) None of these

14. The number of persons were born after P is same as the number of persons born before__?
(a) M (b) R (c) Q
(d) U (e) None of these

15. Which of the following is odd one?
(a) Q (b) L (c) R
(d) P (e) S

Direction (16-20): In each of the questions below are given some statements followed by two conclusions. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.
(a) If only conclusion I follows.
(b) If only conclusion II follows.
(c) If either conclusion I or II follows.
(d) If neither conclusion I nor II follows.
(e) If both conclusions I and II follow.

16. **Statements:** A>M>R=F≥Z<X<C<V>B>N
Conclusion: **I:** A≥Z **II:** Z<V

17. **Statements:** Z<X<C≤V;B>C<G<H≤J
Conclusion: **I:** Z<G **II:** X<J

18. **Statements:** Q≥W≥E≥R<T<Y≤U≤I
Conclusion: **I:** Q≥T **II:** R≤I

19. **Statements:** A<S<D=F>G;H>D<Z<X<C
Conclusion: **I:** A<C **II:** C≥G

20. **Statements:** C=V>B>N>M<S<D<F<G
Conclusion: **I:** B>M **II:** M<G

Direction (21-25): Study the following information carefully and answer the questions given below
In a certain code language:
"Never talk between others" is coded as "sm nt ro fi"
"Others should be helpful" is coded as "ro el ac jq"
"Never be time specific" is coded as "fi dg el pa"
"Focus between specific hours" is coded as "hy dg nt ks"

21. What is the code for "Never together" in the given code language?
(a) nt ro (b) ro fi (c) fi uy
(d) jq nt (e) None of these

22. What is the code for "specific" in the given code language?
(a) dg (b) ac (c) jq
(d) fi (e) None of these

23. What is the code for "Others" in the given code language?
(a) sm (b) ro (c) el
(d) pa (e) None of these

24. The code "el" is coded as which of the following word?
(a) never (b) time (c) focus
(d) be (e) None of these

25. What may be the possible code for "focus real" in the given code language?
(a) ks ze (b) ro hy (c) hy tr
(d) either (a) or (c) (e) nt me

Direction (26-29): Study the following information carefully and answer the questions given below:

Six persons are sitting in a row facing to the north and they have different ages but not necessarily in the same order. C sits 3rd from one of the end. The one who is 12 year old sits 2nd to the right of C. The number of persons sit right of the one who 12 year old is same as the number of persons sit to the left of D. O sits 2nd to the right of the one who is 6 year old. Two persons sit between D and B, whose age is twice than D. N sits to the right of P. The one who 36 year old sits 3rd to the left of the one who 15 year old. The age of O is 18 year.

26. If P is 3 year older than C, then which of the following is the age of P?
(a) 39 Years (b) 33 Years (c) 21 Years
(d) 9 Years (e) None of these

27. What is the total age of C and B?
(a) 44 (b) 48 (c) 18
(d) 42 (e) 27

28. How many persons sit between P and D?
(a) More than three (b) None
(c) Two (d) One (e) None of these

29. Who among the following sits at the extreme end of the row?
(a) C (b) B (c) N
(d) O (e) D

Direction (30-34): Study the following information carefully and answer the questions given below:

Seven persons were born in different years i.e. 1953, 1963, 1968, 1976, 1990, 1993, 1998. 2019 is the base year for measuring the age of all persons.
Not more than two persons were born before P. One person was born between V and S and none of them have even numbered age. There are as many persons were born before U as after Q. Difference between the age of T and S is not less than 20 years. T was born before Q and after R. Either P or U have odd numbered age.

30. In which of the following year T was born?
(a) 1953 (b) 1968 (c) 1990
(d) 1998 (e) None of these

31. What is the sum of the age of R and S?
(a) 92 (b) 69 (c) 87
(d) 50 (e) None of these

32. Who among the following is the oldest person?
(a) P (b) Q (c) R
(d) T (e) None of these

33. Which of the following pair of combination is true?
(a) P- 29 (b) Q-26 (c) R-56
(d) S-43 (e) None is true

34. How many persons are younger than U?
(a) None (b) One (c) Two
(d) Three (e) More than three

35. In the given word '**SPLENDOR**', in which consonant changed into its previous letter and the vowel into its next letter (according to the alphabetical order) and then all letters are arranged in alphabetical order from left to right then which of the following letter is fifth from the left end?
(a) R (b) O (c) K
(d) M (e) C

QUANTITATIVE APTITUDE

Directions (36-40): Given table shows the data of population in 5 different parks. Study the data carefully and answer the questions.

Parks	Total Population	Female population
A	400	150
B	500	200
C	700	350
D	800	450
E	900	500

(Total population = Male population + Female population)

36. If 20% of total population did not visit on a particular day in park A of which male population was 60% then what percent of total population in park B is male population who visited in park A?
(a) 45% (b) 40.4% (c) 39.2%
(d) 48.6% (e) None of these

37. What is average of male population in park B, C and D?
(a) 343.33 (b) 313.33 (c) 323.33
(d) 333.33 (e) 353.33

38. By what percent female population in park D is more or less than the male population in park E?
(a) 15% (b) 9.09% (c) 11.11%
(d) 14.28% (e) 12.5%

39. What is ratio of male population in park A & D together to female population in park B & E together?
(a) 6 : 7 (b) 1 : 1 (c) 7 : 6
(d) 5 : 6 (e) 5 : 7

40. If 30 females from each park are above 80 years age then find the average of no. of females who are below or equal to the age of 80 years from all the parks.
(a) 295 (b) 285 (c) 300
(d) 280 (e) 290

41. The ratio of ages of A and B 4 years ago was 5 : 3. The sum of present ages of A, B and C is 80 years. If present age of C is equal to sum of present ages of A and B. find the present age of A.
(a) 17 years (b) 24 years (c) 20 years
(d) 22 years (e) 18 years

42. The ratio of speed of boat in still water to speed of stream is 8 : 1. It takes 4 hours by boat to cover 54 km in downstream & 42 km in upstream. Find the downstream speed of boat.
(a) 25 kmph (b) 24 kmph (c) 21 kmph
(d) 27 kmph (e) 23 kmph

43. Manoj gave 60% of his salary to his wife and invested rest amount in mutual funds. His wife spends 30% amount on grocery and 20% on rent. From remaining amount, she purchased gold worth Rs. 18000. Find salary of Manoj.
(a) Rs 60000 (b) Rs 54000 (c) Rs 64000
(d) Rs 58000 (e) Rs 66000

44. The length & breadth of a rectangle is in ratio 4 : 7. If perimeter is 88 cm. find area of rectangle.
(a) 414 cm^2 (b) 336 cm^2 (c) 448cm^2
(d) 524 cm^2 (e) 396 cm^2

45. The radius of a circle is 14 cm. what is area of another circle having radius 1.5 times of the actual circle?
(a) 1296 cm^2 (b) 1386 cm^2 (c) 1352 cm^2
(d) 1485 cm^2 (e) 1276 cm^2

Directions (46-50): In the following two equations questions numbered (I) and (II) are given. You have to solve both equations and Give answer
(a) If x > y (b) If x ≥ y
(c) If y > x (d) If y ≥ x
(e) If x = y or no relation can be established

46. **I.** $x^2 - 7x + 12 = 0$ **II.** $y^2 - 8y + 12 = 0$

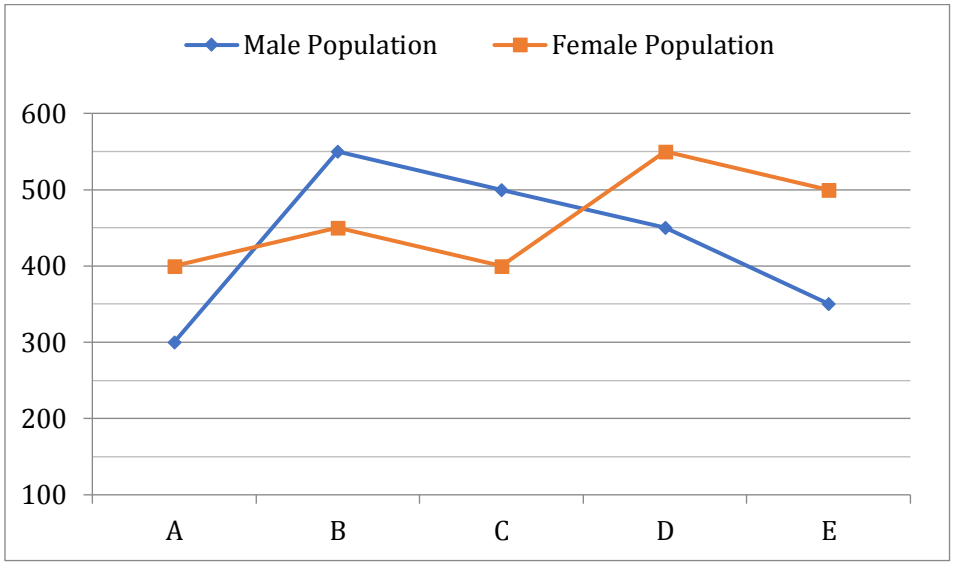
47. **I.** $2x^2 + x - 28 = 0$ **II.** $2y^2 - 23y + 56 = 0$

48. **I.** $2x^2 - 7x - 60 = 0$ **II.** $3y^2 + 13y + 4 = 0$

49. **I.** $x^2 - 17x - 84 = 0$ **II.** $y^2 + 4y - 117 = 0$

50. **I.** $x^2 = 81$ **II.** $(y-9)^2 = 0$

Directions (51-55): Given line graph shows the data of male & female population in 5 different cities. Read the data carefully and answer the questions.



(Total population = Male population + Female population)

51. By what percent total population of city A is more or less than that of city D?
(a) 45% (b) 35% (c) 70%
(d) 30% (e) 60%

52. If in city A, the ratio of male graduates to female graduates is 3 : 4 and total graduates in the city are 70% of total population. Find population of females who are not graduate.
(a) 120 (b) 50 (c) 90
(d) 70 (e) 135

53. What is average of male population in all cities?
(a) 465 (b) 455 (c) 440
(d) 460 (e) 430

54. What percent of Female population in city C is male population in city E?
(a) 90.2% (b) 87.5% (c) 84.5%
(d) 85.5% (e) 114.2%

55. In city B & C, ratio of postgraduates is 7 : 8. Total population who is postgraduate in city B is equal to total population of city A. find ratio of non-postgraduate population in city B to that of city C.
(a) 7 : 3 (b) 8 : 3 (c) 7 : 1
(d) 3 : 1 (e) 8 : 1

56. X liters of milk is taken out and replaced with water from a container having 240 liters milk. Now, 20% of the mixture is taken out and replaced with water. In final mixture, the difference in quantity of milk & water is 128 liters. Find X.
(a) 12 (b) 10 (c) 9
(d) 11 (e) 8

57. A can do a work in 36 days while B can do the same in 48 days. If A work for 'x' days while B work for 'x+2' days then one-third of the work is complete. Find the value of x.
(a) 4 (b) 8 (c) 6
(d) 7 (e) 5

58. A shopkeeper marked the price of an article by 40% above cost price and gave discount of Rs. 224. On the final amount, he charged 10% tax. In the whole transaction, he earned Rs. 158.6. Find cost price of the article.
(a) Rs 750 (b) Rs 760 (c) Rs 744
(d) Rs 757 (e) Rs 748

59. Two friends Pinki and Rinki entered into a partnership by investing an amount of Rs 6000 and Rs 9000 respectively and ratio of their period of investment is 2: 3. Find the profit share of Pinki if profit share of Rinki is Rs 45,000.
(a) Rs 24,000 (b) Rs 20,000 (c) Rs 18,000
(d) Rs 28,000 (e) Rs 25,000

60. Time taken to travel a certain distance of 'x' km at speed of 40 km/h is 2 hours more than the time taken to travel (x+20) km at speed of 60km/h. Find the time taken to travel (x+40) km at the speed of 40 km/h?
(a) 9 hours (b) 5 hours (c) 8 hours
(d) 6 hours (e) 7.5 hours

Directions (61-65): What approximate value should come in place of question mark (?) in the following question?
Note:- (you are not expected to calculate the exact value.)

61. $111.01 + 41.23 + (4.96)^2 + (2.09)^2 = ?$
(a) 195 (b) 162 (c) 181
(d) 170 (e) 189

62. $109.07\sqrt{?} - \frac{61}{21.02} \times ? = 47.96\sqrt{?}$
(a) 441 (b) 169 (c) 250
(d) 121 (e) 324

63. 1332.89 + 171.928 + 17.01 + $?^2$ = 1690.87
(a) 27 (b) 17 (c) 9
(d) 13 (e) 19

64. 150.09% of 20 + $\frac{322.9}{17.02} + \sqrt{?} = (8.96)^2$
(a) 984 (b) 1024 (c) 1360
(d) 1225 (e) 674

65. 56.08% of 149.92 + $\sqrt{28.02 \times 6.98}$ - $11\frac{1}{9}$% of 998.9 = ?
(a) 17 (b) -13 (c) 8
(d) -16 (e) 22

Directions (66-70):- Read the given information carefully and answer the following questions.

There are four hostels i.e. A, B, C and D.
In hostel A: Number of boys are 120 and number of girls are 30% more than that of number of girls in hostel B.
In hostel B: Number of boys are double than that of number of girls.
In hostel C: Number of boys are 100 more than that of boys in hostel A and total boys and girls in C is 1000.
In hostel D: Number of boys is 182 more than the number of boys in hostel A. Average of number of girls of hostel A and that of hostel D is 223.Number of boys in hostel D is 98 less that of boys in hostel B.

66. Difference between number of boys and girls in hostel D is what percent of difference between boys and girls in hostel B?
(a) 53% (b) 58% (c) 63%
(d) 60% (e) 57.5%

67. Find difference between total number of boys and girls together in hostel A and that in hostel D?
(a) 108 (b) 118 (c) 112
(d) 98 (e) 128

68. Find ratio of total number of boys and girls together in hostel B to that of in hostel C?
(a) 3: 5 (b) 2: 5 (c) 3: 4
(d) 4: 5 (e) 6: 5

69. If 20 boys from each hostel left their hostel then find the average of remaining number of boys in all the hostels?
(a) 239.5 (b) 235 (c) 250.5
(d) 240.5 (e) 245.5

70. Total number of boys in hostel A and that of girls in hostel C is what percent more than number of boys in hostel B?
(a) 100% (b) 125% (c) 150%
(d) 137.5% (e) 175%

ENGLISH LANGUAGE

Directions (71-75): Read each sentence to find out if there is any grammatical error or idiomatic error in it. The error, if any, will be in one part of the sentence. The number of part is the answer. If there is no error, the answer is (e).

71. Both leaders agreed to work together (1)/ to ensure that "radicalisation and terrorism" did not (2)/ affect the fabric of the "multi-cultural, multi-ethnic and (3)/ multi-religious societies" of there countries (4)
(a) 1 (b) 2 (c) 3
(d) 4 (e) No Error

72. He moved up the (1)/corporate ladder in (2)/ the early days of his career and (3)/ become president in 1982. (4)
(a) 1 (b) 2 (c) 3
(d) 4 (e) No Error

73. The chargesheet has (1)/ been filed before (2)/a Lucknow court, against all (3)/ those named in the FIR (4)
(a) 1 (b) 2 (c) 3
(d) 4 (e) No Error

74. Delhi could get its first (1)/ stretch of metrolite, a cheaper, (2)/ smaller and slow urban rail (3)/ transit system compared to metro rail (4)
(a) 1 (b) 2 (c) 3
(d) 4 (e) No Error

75. These sales (1)/ led us to think that (2)/ there is not much of a market (3)/ for this kind of product (4)
(a) 1 (b) 2 (c) 3
(d) 4 (e) No Error

Directions (76-80): In the following passage, there are blanks, each of which has been numbered. These numbers are printed below the passage and against each, four words are suggested, one of which fits the blank appropriately. Find out the appropriate word in each case.
The two words 'growth' and 'development' were often used **(76)** in economic discussion.
As soon as 'development economics' emerged as a distinct field of study after the World War II, it 'had the appearance of being a child of growth economics' and, in fact, this child did not differ from what could be expected from a genuine 'son of growth economics'. But, technically speaking, they are not the same.

To a layman, these two terms appear to be **(77)**. However, in the 1950s and 1960s, economists drew a line of demarcation between economic growth and economic development. True enough, the concept of economic development is broader than economic growth. Development is taken to mean 'growth plus change', whereas economic growth means growth only quantitative expansion of an economy. Economic growth is, thus, a quantitative concept, while economic development is a **(78)** concept. C. P. Kindleberger says that growth involves focusing on height or weight while development focuses on the change in functional capacity.

Economic growth is defined in positive terms. It is measured by the sustained increase in real, national or per capita income of a nation over time. Economic growth is usually measured in terms of an increase in real GNP or GDP over time or an increase in income per head over time. Growth is **(79)** as it enables a society to consume more goods and services.

That is why growth is considered to be the basis of advancing real living standards or human welfare. At the same time, it is also true that growth does not necessarily lead to an increase in human welfare. Economic development is more **(80)** than economic growth.

76. (a) Contrasting (b) Alternative
(c) Regular (d) Interchangeably
(e) None of these.

77. (a) Synonymous (b) Ambiguity
(c) Hesitant (d) Intrinsic
(e) None of these.

78. (a) Adaptive (b) Reciprocate (c) Qualitative
(d) Widening (e) None of these.

79.
(a) Requiring (b) Desirable
(c) Retarding (d) Breakthrough
(e) None of these.

80. (a) Superior (b) Continuous
(c) Significantly (d) fundamental
(e) None of these.

Directions (81-88): Read the following passage and answer the following questions. Some words are highlighted to help you answer some of the questions.

In terms of setting goals in your organization, if you know where you want your organization to go, you'll be in a strong position to know whether or not you've arrived at that goal. Goal setting is an important tool not only for clarifying direction but also for assessing organizational progress. Set clear goals, as those enable you to be more effective toward guiding your performance and _____ your results.

Useful goals should be challenging and achievable. Setting a sales target that you'll almost certainly reach may make you and your coworkers feel good about yourselves, but it won't spur you to work harder and achieve your potential. Setting a sales target that is nearly impossible to reach won't make your staff work harder, because they'll know the outcome will inevitably fall short. To be truly useful, goals should also be clear and – whenever possible – quantifiable.

It is more effective to say that you want your company to expand into two new markets during the next two years than to say that you want it to grow considerably. The former provides clear criteria that drive you to achieve, and indicators that tell you when you've succeeded. The latter is so vague that you won't really know what you're working toward or if you've achieved it.

To make your goal-setting meaningful and important, the members of your staff must have a clear idea of what they're working toward, and they must have the tools and resources to achieve the goals you've created. Communicate your goals clearly in meetings and in memos. Be available to answer questions, give feedback and offer support. Celebrate successes and **reflect** when your efforts fall short.

Coordinate efforts among team members to work in a shared direction with the objective of achieving the goals you've set. Create a series of goals to be achieved over time, such as opening one store a year for five years. Align short-term goals, such as improving quarterly cash flow with longer term goals, such as opening new stores.

In some ways, the process of setting and working toward goals is even more important than whether or not you actually achieve them. Circumstances **unfold** over time, such as changes in market conditions or unforeseen opportunities that make previously set goals obsolete. Failure to reach a goal doesn't necessarily mean that your work has been unsuccessful. If your goals turn out to be unrealistic, take a step back and set new goals that will guide your plans and processes in a more relevant direction.

81. Which of the following statement(s) is/are true in context of the given passage?
(a) Goal setting should be failure proof as the steps taken cannot be reverted
(b) Long term goal can be divided into short term goals.
(c) Both (a) and (d)
(d) Success of goal setting is based on the final result.
(e) None of these.

82. As per the passage, which of the following are the prerequisite for the team members to achieve the desired goal?
(i) Skills
(ii) Tools
(iii) Clear objectives
(a) Only (i) (b) Only (ii)
(c) Both (ii) and (i) (d) Both (ii) and (iii)
(e) All of these.

83. Which of the following could be the appropriate filler for the blank given in the passage?
(a) Describe (b) Evaluating (c) Improve
(d) Degenerating (e) None of these.

84. Which of the following characteristics of a good goal is/are mentioned in the passage?
(i) Demanding
(ii) Realistic
(iii) Precise
(a) Only (i) (b) Only (ii)
(c) Both (ii) and (iii) (d) Both (i) and (iii)
(e) All of these.

85. Which of the following is similar in meaning to the word **'REFLECT'** as used in the passage?
(a) Remorse (b) Deject (c) Apprehend
(d) Express (e) None of these.

86. As per the passage, which of the following highlight the importance of details while setting goal?
(a) Proper understanding of the objective
(b) Motivation for goal accomplishment
(c) Easy to explain
(d) Both (a) and (b)
(e) None of these.

87. Which of the following phrase can be concluded from the sentence highlighted in the passage?
(a) The way to get started is to quit talking and begin doing.
(b) Success is a journey not a destination.
(c) When you reach the end of your rope, tie a knot in it and hang on.
(d) The future belongs to those who believe in the beauty of their dreams.
(e) None of these.

88. Which of the following is similar in meaning to the word **'UNFOLD'** as used in the passage?
(a) Flatten (b) Recount (c) Extend
(d) Occur (e) None of these.

Directions (89-93): Which of the phrases (a), (b), (c), (d) given below each sentence should replace the phrase printed in bold in the sentence to make it grammatically correct? If the sentence is correct as required, mark (e) as the answer.

89. Both the magistrate and the station-house **officer has arrived on a conclusion at** a mere glance of the complaint.
(a) officers having arrived on a conclusion at
(b) officer has arrived on the conclusion on
(c) officer have arrived on a conclusion at
(d) officer has arrived on the conclusion on
(e) No correction required

90. Jammu and Kashmir was emptied of its tourists and the **Amarnath pilgrims at the peak of the** season on the pretext of terror threats.
(a) Amarnath pilgrim at the peak of the
(b) Amarnath pilgrims at the peek of the
(c) Amarnath pilgrim at the peek of the
(d) Amarnath pilgrims at the peak on the
(e) No correction required

91. The decision to prosecute the advocate for filing false **complaints are an encouraging sign** that his run may not last.
(a) complaints is an encouraging sign
(b) complaints are a encouraging sign
(c) complaints is a encouraging sign
(d) complaint is a encouraging sign
(e) No correction required

92. The government's plan **to rise a new class of local leaders** through Block Development Council elections in Jammu and Kashmir is very impressive.
(a) to rise a new class of local leader
(b) to raise a new classes of local leaders
(c) to rise a new classes of local leaders
(d) to raise a new class of local leaders
(e) No correction required

93. The cemetery where the **four bodies was exhume** stands testimony to the tragedy.
(a) four bodies were exhume
(b) four bodies were exhumed
(c) four body was exhumed
(d) four body were exhume
(e) No correction required

Directions (94-98): In the following questions, each sentence consists of a blank that can be filled with any of the given word (s) to make the sentence grammatically correct and contextually meaningful. Choose the most appropriate alternative reflecting the word (s) that fills the blank. If all the given words can fill the blank correctly choose option (e) i.e., "All of these" as your answer choice.

94. Politics is a field where you can make a big _____ contribution, wherever in the world you may be.
(A) Significantly
(B) Impactful
(C) Excite
(a) only (A) (b) only (B)
(c) only (B) and (C) (d) only (A) and (B)
(e) All of these

95. The Jammu and Kashmir government splashed full-page advertisements in local newspapers to _____ people from taking part in the on-going shutdown.
(A) Discourage
(B) Dissuade
(C) Prevented
(a) only (A) (b) only (B)
(c) only (A) and (C) (d) only (A) and (B)
(e) All of these

96. District Magistrate Naveen Kumar confirmed death of one person and wounds received by three others in the latest _____.
(A) Violence
(B) Scenario
(C) Offer
(a) only (A) (b) only (B)
(c) only (B) and (C) (d) only (A) and (B)
(e) All of these

97. The Delhi High Court on Friday permitted Indiabulls Housing Finance Ltd. to _____ its plea to restrain BJP leader
(A) Amplifying
(B) Withdraw
(C) Forecast
(a) only (A) (b) only (B)
(c) only (B) and (C) (d) only (A) and (B)
(e) All of these

98. Nearly 500 terrorists are waiting in various training camps along the Line of Control, looking for _____ to sneak into Jammu and Kashmir
(A) Opportunities
(B) Methods
(C) Ways
(a) only (A) (b) only (B)
(c) only (B) and (C) (d) only (A) and (B)
(e) All of these

Directions (99-100): For each question is given a sentence or a group of sentences with four highlighted words. Among the four highlighted words, two words needs to be interchanged to make the sentence grammatically and contextually correct. Choose the option which mentions the correct interchange

99. The risk **come (A)** is rising not because the tanker per se contains enough oil to **squeeze (B)** the market, but the risk that the **incident (C)** will be retaliated or more attacks would **premium (D)**
(a) B-C (b) A-C (c) B-D
(d) C-D (e) A-D

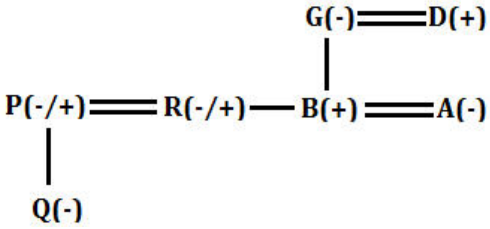
100. India's hopes for **retaining (A)** the right to implement data **negotiators (B)** laws remain alive as Indian **localisation (C)** declined to agree to the e-commerce **chapter (D)** of RCEP agreement.
(a) B-C (b) A-C (c) B-D
(d) C-D (e) A-B

Solutions

REASONING ABILITY

1. (d);

Solutions (2-4):

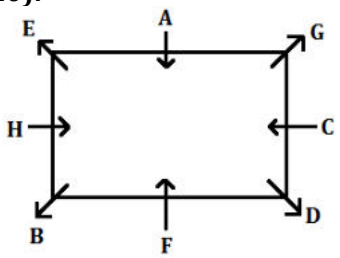


2. (c); 3. (b); 4. (a);

5. (d);

6 2 4 7 3 9 8 5 4
7 3 5 6 2 8 9 4 5

Solutions (6-10):



6. (d); 7. (b); 8. (a);

9. (b); 10. (a);

Solutions (11-15):

Months	Dates	Persons
January	15	Q
	30	O
March	15	L
	30	M
April	15	R
	30	T

Months	Dates	Persons
September	15	P
	30	U
November	15	N
	30	S

11. (d); 12. (c); 13. (c);

14. (a); 15. (e);

Solutions (16-20):

16. (b); **I:** A≥Z (False) **II:** Z<V (True)

17. (e); **I:** Z<G (True) **II:** X<J (True)

18. (d); **I:** Q≥T (False) **II:** R≤I (False)

19. (a); **I:** A<C (True) **II:** C≥G (False)

20. (e); **I:** B>M (True) **II:** M<G (True)

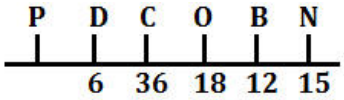
Solutions (21-25):

Words	Codes
Never	fi
talk	sm
between	nt
others	ro
Should	jq / ac
be	el
helpful	ac /jq
time	pa
specific	dg
focus	ks /hy
hours	hy /ks

21. (c); 22. (a); 23. (b);

24. (d); 25. (d);

Solutions (26-29):



26. (a); 27. (b); 28. (b);

29. (c);

Solutions (30-34):

Persons	Years	Age (in year based on 2019)
R	1953	66
U	1963	56
P	1968	51
T	1976	43
V	1990	29
Q	1993	26
S	1998	21

30. (e); 31. (c); 32. (c);

33. (b); 34. (e);

35. (b);

S P L E N D O R
C F K M O P Q R

QUANTITATIVE APTITUDE

36. (b); male population who did not visit park A
$= \frac{20}{100} \times \frac{60}{100} \times 400 = 48$
Male population who visited in park A
$= 400 - (150 + 48) = 202$
Required % $= \frac{202}{500} \times 100 = 40.4\%$

37. (d); male population in park B, C & D
= (500-200)+(700-350)+(800-450) = 1000
Required average $= \frac{1000}{3} = 333.33$

38. (e); Male population in park E $= 900 - 500 = 400$
Required % $= \frac{450-400}{400} \times 100 = 12.5\%$

39. (a); male population in park A & D
$= 400 - 150 + 800 - 450 = 600$
Required ratio = $600 : (200 + 500) = 6 : 7$

40. (c); total female population
$= 150 + 200 + 350 + 450 + 500 = 1650$
Female population above 80 years age
$= 30 \times 5 = 150$
Required average $= \frac{1650-150}{5} = 300$

41. (b); let present age of A & B be x & y years respectively
$\frac{x-4}{y-4} = \frac{5}{3}$
$3x - 12 = 5y - 20$
$3x = 5y - 8$ ..... (i)
Let present age of C be z years
$x + y + z = 80$
$x + y = z$
$x + y = 40$ ..... (ii)
On solving (i) & (ii)
$x = 24\ years$
Present age of A = 24 *years*

42. (d); let speed of boat in still water & stream be 8x kmph & x kmph respectively
ATQ, $\frac{54}{8x+x}+\frac{42}{8x-x}=4$
$\frac{6}{x}+\frac{6}{x}=4 \Rightarrow x=3$
Downstream speed = 8x + x = 27 kmph

43. (a); let salary of Manoj be Rs 100x
Amount given to wife = $\frac{60}{100}\times 100x$ = Rs.60x
ATQ, $60x\times\frac{50}{100}=18000$
$x=600$
Salary of Manoj = $100x = Rs\ 60000$

44. (c); let length & breadth of rectangle be 4x cm & 7x cm
ATQ, $2(4x+7x)=88$
$x=4$
Area of rectangle = $4x\times 7x = 448\ cm^2$

45. (b); radius of second circle = $1.5\times 14 = 21\ cm$
Required area of circle = $\pi r^2 = \frac{22}{7}\times 21\times 21$
$= 1386\ cm^2$

46. (e); **I.** $x^2 - 7x + 12 = 0$
$x^2-4x-3x+12=0$
$(x-4)(x-3)=0$
$x=3,4$
II. $y^2 - 8y + 12 = 0$
$y^2-6y-2y+12=0$
$(y-6)(y-2)=0$
$y=2,6$
No relation can be established

47. (d); **I.** $2x^2 + x - 28 = 0$
$2x^2 + 8x - 7x - 28 = 0$
$2x(x+4) - 7(x+4) = 0$
$(2x-7)(x+4)= 0$
$x=-4,\frac{7}{2}$
II. $2y^2 - 23y + 56 = 0$
$2y^2 - 16y - 7y + 56 = 0$
$2y(y-8) - 7(y-8) = 0$
$(2y-7)(y-8) = 0$
$y=\frac{7}{2},8$
$y \geq x$

48. (e); **I.** $2x^2 - 7x - 60 = 0$
$2x^2 - 15x + 8x - 60 = 0$
$x(2x-15) + 4(2x-15) = 0$
$(x+4)(2x-15)=0$
$x=-4,\frac{15}{2}$
II. $3y^2 + 13y + 4 = 0$
$3y^2 + 12y + y + 4 = 0$
$3y(y+4) + 1(y+4) = 0$
$(3y+1)(y+4) = 0$
$y=-\frac{1}{3},-4$
No relation between x and y

49. (e); **I.** $x^2 - 17x - 84 = 0$
$x^2 + 4x - 21x - 84 = 0$
$(x+4)(x-21) = 0$
$x = -4, 21$
II. $y^2 + 4y - 117 = 0$
$y^2 - 9y + 13y - 117 = 0$
$(y-9)(y+13) = 0$
$y = 9, -13$
No relation between x and y

50. (d); **I.** $x^2 = 81$
$x=\pm 9$
II. $(y-9)^2 = 0$
$y=9$
Clearly, $x \leq y$

51. (d); total population of city A = 300 + 400 = 700
Total population of city D = 450 + 550 = 1000
Required % = $\frac{1000-700}{1000}\times 100 = 30\%\ less$

52. (a); total graduate population = $\frac{70}{100}\times(300+400)$
= 490
Female graduate population = $\frac{4}{7}\times 490 = 280$
Female population who is not graduate
$= 400 - 280 = 120$

53. (e); Required average = $\frac{300+550+500+450+350}{5}$
$=\frac{2150}{5}=430$

54. (b); Required % = $\frac{350}{400}\times 100 = 87.5\%$

55. (d); Postgraduate population in city B
= 300 + 400 = 700
Postgraduate population in city C
$=\frac{8}{7}\times 700 = 800$
Required ratio = $(1000-700) : (900-800)$
$= 300 : 100 = 3 : 1$

56. (b); When X liter milk is taken out
Quantity of milk left = (240-X) lit
Quantity of water = X lit
When 20% of mixture taken out
Remaining quantity of milk = $\frac{80}{100}\times(240-X)$
= (192 – 0.8X) lit
Remaining quantity of water
$=\frac{80}{100}\times X+\frac{20}{100}\times 240 = (0.8X+48)\ lit$
ATQ, $(192-0.8X)-(0.8X+48)=128$
$16 = 1.6X \Rightarrow X = 10$

57. (c);

	Time (days)	Work (units)	Efficiency (units/day)
A	36	144	4
B	48		3

Work completed by A and B in mentioned days
$= \frac{1}{3} \times 144 = 48\ units$
ATQ, $4x + 3(x + 2) = 48$
$x = 6$

58. (a); let cost price be Rs. 100x
Marked price = $\frac{140}{100} \times 100x = Rs\ 140x$
Selling price = $Rs\ (140x - 224)$
Selling price after tax = $\frac{110}{100} \times (140x - 224)$
= Rs $(154x - 246.4)$
ATQ, $100x + 158.6 = 154x - 246.4$
$x = 7.5$
Cost price of article = $100x = Rs\ 750$

59. (b); Let period of investment of Pinki and Rinki be 2x and 3x units respectively
Ratio of profit share
Pinki Rinki
$6000\times 2x : 9000\times 3x \Rightarrow 4 : 9$
Profit share of Pinki=Rs 20,000

60. (c); ATQ
$\frac{x}{40} - \frac{x+20}{60} = 2$
$x = 280$ km
Required time=$\frac{320}{40} = 8$ hours

61. (c); $111.01 + 41.23 + (4.96)^2 + (2.09)^2 = ?$
$111 + 41 + 5^2 + 2^2 = ?$
$? = 152 + 25 + 4 = 181$

62. (a); $109.07\sqrt{?} - \frac{61}{21.02} \times ? = 47.96\sqrt{?}$
$109\sqrt{?} - 48\sqrt{?} \approx \frac{61}{21} \times ?$
$61\sqrt{?} = \frac{61}{21} \times ?$
? = 441

63. (d); $1332.89 + 171.928 + 17.01 + ?^2 = 1690.67$
$1333 + 172 + 17 - 1691 \approx -?^2$
$?^2 = 169$
? = 13

64. (b); $150.09\%\ of\ 20 + \frac{322.9}{17.02} + \sqrt{?} = (8.96)^2$
$30 + 19 + \sqrt{?} = 81$
? = 1024

65. (b); 56.08% of 149.92 + $\sqrt{28.02 \times 6.98}$ – $11\frac{1}{9}\%$ 998.9=?
56% of $150 + \sqrt{28 \times 7} - \frac{1}{9} \times 999 \approx ?$
84 + 14 – 111 = -13

Solutions (66-70):
Let number of girls in hostel B=100x
Then number of boys in hostel B=200x
Number of girls in hostel A= 130x
Number of boys in hostel C=120+100=220
Number of girls in hostel C=1000-220=780
Total number of girls in hostel A and that of in hostel D=446
Number of girls in hostel D=(446-130x)
Number of boys in hostel D=302
ATQ
200x – 302 = 98 ⇒ x = 2

Hostels	Boys	Girls
A	120	260
B	400	200
C	220	780
D	302	186

66. (b); Required percent=$\frac{(302-186)}{(400-200)} \times 100 = 58\%$

67. (a); Required difference
$= (302 + 186) - (120 + 260) = 108$

68. (a); Required ratio = $\frac{600}{1000} = \frac{3}{5}$

69. (d); Required average = $\frac{100+380+200+282}{4} = 240.5$

70. (b); Total number of boys in hostel A and that of girls in hostel C = 900
Required %=$\frac{900-400}{400} \times 100 = 125\%$

ENGLISH LANGUAGE

71. (d); In the given sentence, error lies in part (4). In it use of 'there' is incorrect instead it should be 'their' because 'there' is used to refer particularly about a location and 'their' is possessive form of 'they'. As the given sentence is referring to the countries of both leaders, so 'their' should be used. Hence, the correct answer choice would be option (d).

72. (d); In the given sentence, error lies in part (4). In it use of 'become' is incorrect instead it should be 'became' because the given sentence is in past tense. Hence, the correct answer choice would be option (d)

73. (e); There is no grammatical error in the given question. Hence, the correct answer choice would be option (e)

74. (c); In the given sentence, error lies in part (3). In it use of 'slow' is incorrect instead it should be 'slower' as per the rule of parallelism. Hence, the correct answer choice would be option (c)

75. (a); Here, error lies in part (2) of the given sentence. In it use of 'led' is incorrect instead it should be 'lead' because the given sentence is in present tense and 'led' is past participle of 'lead'. Hence, the correct answer choice would be option (a)

76. (d); From the given options, 'Interchangeably' is the most appropriate answer choice because going through the given sentence it can be seen that the blank needs to be filled with adverb and not an adjective which eliminates the remaining options. Hence, the correct answer choice would be option (d)

77. (a); From the given options, 'Ambiguity' being a Noun cannot be the appropriate filler. And from the remaining options only 'Synonymous' will fit the given blank to make the given sentence grammatically and contextually correct. Hence, the correct answer choice would be option (a)

78. (c); From the given options, 'Reciprocate' and 'Widening' cannot be used to fill the given blank because of the sentence structure which requires adjective to be filled in the given blank. From the remaining two 'Qualitative' is the most suitable answer choice as can be seen from the usage of 'Quantitative' in the preceding sentence. Hence, the correct answer choice would be option (c)

79. (b); Going through the passage it can be clearly seen that the appropriate filler for the given blank would be 'desirable' as it matches the theme of the given passage. Hence, the correct answer choice would be option (b)

80. (d); From the given options, 'superior' will make the given sentence superfluous. Also, 'Continuous' and 'significantly' doesn't make the given sentence contextually and grammatically correct. So, only 'fundamental' matches the theme of the given passage to make the given sentence contextually as well as grammatically correct. Hence, the correct answer choice would be option (d)

81. (b); From the given statements, only (b) is true. Evidence in support of the given argument can be found from the last line of the fifth paragraph in which it is mentioned that *'Align short-term goals, such as improving quarterly cash flow with longer term goals, such as opening new stores'* From the given statement it can be clearly seen that long term goals can be divided into short term goals. Also, statement (a) and (d) are incorrect as can be seen from the last few lines of the last paragraph. Hence, the correct answer choice would be option (b)

82. (d); Evidence in support of the given answer can be found in the fourth paragraph of the given passage in which it is stated that '*To make your goal-setting meaningful and important, the members of your staff must have a clear idea of what they're working toward, and they must have the tools and resources to achieve the goals you've created.'* From the given statement both (ii) and (iii) can be inferred clearly. However there is no mention of the 'skill' in the passage. Hence, the correct answer choice would be option (d).

83. (b); From the given options, (d)doesn't fit with the theme of the given passage. Also, (a) and (c) will make the given sentence grammatically incorrect because of the rule of parallelism. So, only option (b) it the required answer choice which fits the given blank contextually and makes the given sentence grammatically correct.

84. (e); Evidence in support of the given answer can be found in 2nd and 3rd paragraph of the given passage in which it is stated that '*Useful goals should be challenging and achievable……,To be truly useful, goals should also be clear and – whenever possible – quantifiable…… and the latter is so vague that you won't really know what you're working toward or if you've achieved it'.* Hence, the correct answer choice is option (e)

85. (d); Remorse means deep regret or guilt for a wrong committed.
Deject means make sad or dispirited; depress
Apprehend means understand or perceive.
So from the given options only 'Express' is similar in meaning to the highlighted word. Hence, the correct answer choice would be option (d)

86. (d); Evidence in support of the given argument can be found from the last line of the third paragraph in which it is stated that '*The former provides clear criteria that drive you to achieve, and indicators that tell you when you've succeeded. The latter is so vague that you won't really know what you're working toward or if you've achieved it.*' From the given statement both (a) and (b) can be inferred clearly. Hence, the correct answer choice would be option (d).

87. (b); In the given sentence, author is saying that the process of setting goals is more important than achieving it. So, from the given quotes option (b) expressed the most similar meaning to the highlighted phrase and hence, the correct answer choice.

88. (d); From the given options, all of the given words are synonymous to the highlighted word but option (d) is the most appropriate synonym of the given word as used in the passage. Hence, the correct answer choice would be option (d)

89. (c); In the highlighted phrase usage of 'has' is incorrect instead it should be 'have' because when two or more subjects are joined with 'and' plural verb is used. Also, articles 'a' and 'the' can be used here interchangeably. Hence, the correct answer choice would be option (c)

90. (e); There is no grammatical error in the highlighted phrase. Hence, the correct answer choice would be option (e)

91. (a); In the highlighted phrase, use of 'are' is incorrect because in the given sentence subject is 'decision' not 'complaints' and as per subject verb agreement singular verb should be used for singular subject. Hence, the correct answer choice would be option (a)

92. (d); In the highlighted phrase, use of 'rise' is incorrect instead it should be 'raise' because If you raise something, it means that you elevate it - you move it up or lift it to a higher level and If something *rises*, it means that it elevates itself - it goes up itself. No external force is needed. Also, difference between them is that *raise* is transitive (it must have a direct object) and *rise* is intransitive (no direct object). Hence, the correct answer choice would be option (d).

93. (b); In the highlighted phrase use of 'was' is incorrect because the subject 'Four bodies' is plural. Also, the given sentence is in past tense, so at the place of 'exhume' we should use 'exhumed'. Hence, the correct answer choice would be option (b)

94. (b); Going through the given sentence it can be clearly seen that the appropriate filler for the given blank would be an adjective. So from the given options, only (B) satisfies the aforesaid criteria. Hence the correct answer choice.

95. (d); All of the given options are synonymous to each other but 'prevented' will make the given sentence grammatically incorrect. Remaining two can be used to fill the given blank to make a grammatically correct and contextually meaningful sentence. Hence, the correct answer choice would be option (d)

96. (a); From the given options, only 'violence' can fit the given blank to make the given sentence both grammatically and contextually correct. Hence, the correct answer choice would be option (a).

97. (b); From the given options, (A) will make the given sentence grammatically incorrect whereas 'Forecast' doesn't fit the blank to make contextually meaningful sentence. Only (B) fits the given blank to make the given sentence both grammatically and contextually correct. Hence, the correct answer choice is option (b)

98. (e); All of the given fillers can be used to fill the given blank to make the given sentence both grammatically and contextually correct. Hence, the correct answer choice would be option (e).

99. (e); In the given sentence, 'come and premium' are incorrect in their current position as can be seen from the 'attacks would premium' which is not adding a valid meaning to the sentence but interchanging them will make the given sentence both grammatically and contextually correct. Hence, the correct answer choice would be option (e)

100. (a); In the given sentence, 'localisation and negotiators' in their current position are incorrect as they are not adding reasonable meaning to the sentence. But interchanging them will make the given sentence both grammatically and contextually correct. Hence, the correct answer choice would be option (a)

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REASONING ABILITY

Directions (1-5): Study the following information carefully and answer the questions given below:
Nine boxes named P, Q, R, S, T, U, V, W and X are placed one above other but not necessarily in the same order. Only five boxes are placed between P and R. T is placed immediate above R. Only three boxes are placed between T and S. As many boxes placed between P and S as between Q and T. U is placed below Q, but not at bottom. More than four boxes are placed between T and U. One box is placed between U and V. Box X is placed above box W.

1. Which box is placed at bottom?
(a) P (b) S (c) T
(d) X (e) V

2. How many boxes are placed between X and P?
(a) one (b) two (c) three
(d) four (e) more than four

3. If in a certain way S is related to X and P is related to W then by which among the following Q is related?
(a) P (b) V (c) R
(d) T (e) S

4. Which box is placed immediate above and immediate below Q?
(a) R and W (b) X and U (c) U and S
(d) S and X (e) T and R

5. What is the position of W ?
(a) fourth from the top
(b) fifth from the top
(c) third form the bottom
(d) sixth from the bottom
(e) forth from the bottom

Directions (6-10): Study the information and answer the following questions:
In a certain code language
Get details for venue --- fe wi mo rs
Venue book required details --- rs gt rd wi
Details required book guest --- wi gt rd ra
Guest get more venue ---- ra fe gk rs

6. What is the code for 'details' in the given code language?
(a) fe (b) mo (c) wi
(d) ra (e) None of these

7. What is the code for the word 'guest venue' in the given code language?
(a) gt gk (b) fe mo (c) rs ra
(d) gt ra (e) None of these

8. What is the code for the word 'get' in the given code language?
(a) gt (b) fe (c) rs
(d) rd (e) None of these

9. If the code for the words 'for ____' is coded as 'mo gk ' in the coded language then what will be the missing word?
(a) book (b) required (c) guest
(d) more (e) either (a) or (d)

10. What is the code for 'book' in the given code language?
(a) rs (b) gt (c) rd
(d) kl (e) either (b) or (c)

Directions (11-15): Study the following information carefully and answer the given questions:

Eight friends A, B, C, D, W, X, Y and Z are sitting around a square table in such a way that four of them sit at four corners of the square while the other four sit in the middle of each sides. The ones who sit at the four corners face outside while those who sit in the middle of the sides face inside.

C is an immediate neighbor of A, who faces center. W sits second to the left of C. Y sits fourth to the left of W. Two persons sit between Y and D (either from left or right). C is not an immediate neighbor of D. B sits second to the right of D. X sits second to the right of B.

11. How many persons sits between Z and C when counted from left of Z?
(a) None (b) One (c) Two
(d) Three (e) More than three

12. What is the position of Y with respect to D?
(a) Third to the right
(b) Second to the right
(c) Fourth to the left
(d) Third to the left
(e) None of these

13. Four of the following five are alike in a certain way and so form a group. Who among the following does not belong to that group?
(a) Z (b) W (c) D
(d) C (e) Y

14. Who sits second to the right of A?
(a) B (b) X (c) Y
(d) D (e) None of these

15. Who among the following sits between B and C, when counted from the right of B?
(a) Y and Z (b) W and D (c) X and Y
(d) A and W (e) A and D

Directions (16-20): In these questions, a relationship between different elements is shown in the statements. The statements are followed by two conclusions. Give answer

16. Statement: L≤T≤I≥M<X, W<P≤L≥B≥K
I. K<X **II.** W>M
(a) if only conclusion II is true.
(b) if only conclusion I is true.
(c) if neither conclusion I nor II is true.
(d) if either conclusion I or II is true.
(e) if both conclusions I and II are true.

17. Statement: Z<U≤D≤A≤M<S, Q>A≤Y<G
I. Z<Y **II.** S>Q
(a) if both conclusion I and II are true.
(b) if only conclusion I is true.
(c) if neither conclusion I nor II is true.
(d) if either conclusion I or II is true.
(e) if only conclusion II is true.

18. Statement: L≤T≤I≥M<X, W<P≤L≥B≥K
I. K≥M **II.** P>M
(a) if only conclusion II is true.
(b) if either conclusion I or II is true.
(c) if neither conclusion I nor II is true.
(d) if only conclusion I is true.
(e) if both conclusions I and II are true.

19. Statement: Z<U≤D≤A≤M<S, Q>A≤Y<G
I. M≥U **II.** G>Z
(a) if only conclusion II is true.
(b) if only conclusion I is true.
(c) if neither conclusion I nor II is true.
(d) if either conclusion I or II is true.
(e) if both conclusions I and II are true.

20. Statement: J>K≥H=U≥B≤T<F≤R
I. J>B **II.** H<R
(a) if only conclusion II is true.
(b) if either conclusion I or II is true.
(c) if neither conclusion I nor II is true.
(d) if only conclusion I is true.
(e) if both conclusions I and II are true.

21. How many such pairs of letters are there in the word "Streaming" having same number of letters between them as they have between them according to the alphabetical order.
(a) Two
(b) More than Three
(c) Three
(d) One
(e) None of these

22. Find the odd one out?
(a) JQK (b) BYC (c) LRM
(d) CXD (e) OPX

Direction (23-25): Study the information and answer the following questions:

D is 20m in south of A. C is 5m east of D. E is 10m north of C. F is 10m east of E. G is 15m south of F. X is 15m west of G. B is 10m to the east of A. Z is 10m to the south of B. L is 10m to east of C.

23. In which direction is point A with respect to point G?
(a) North-west (b) South-east (c) North
(d) South-west (e) North-east

24. Four of the following are alike in a certain way so form a group, which of the following does not belong to that group?
(a) EF (b) EC (c) LG
(d) BZ (e) CL

25. What is distance between point F and L?
(a) 10m (b) 5m (c) 15m
(d) 20m (e) 25m

Directions (26-30): Study the information and answer the following questions:

Eight persons K, L, M, N, O, P, Q and R sitting in a row. Some of them are facing north while some are facing south. N sits fifth to the right of M but none of them sits at an extreme end. Q sits third to the right of N. L sits second to the right of Q. Only one person sit between L and P. R sits third to the left of P. K sits second to the left of O. Both the person sitting at extreme ends faces opposite direction to each other. Both the immediate neighbours of M faces same direction. R sits to the left of L and both of them are facing opposite direction to each other. R does not face north direction.

26. Who among the following sits third to the right of R?
(a) Q (b) K (c) M
(d) N (e) None of these

27. Which among the following pair sit at the end of the row?
(a) Q, L (b) R, K (c) O, P
(d) L, R (e) None of these

28. How many persons sits to the right of K?
(a) Two
(b) More than Three
(c) Three
(d) One
(e) None of these

29. Who among the following sits second to the right of Q?
(a) L (b) N (c) M
(d) O (e) None of these

30. Four of the following are alike in a certain way so form a group, which of the following does not belong to that group?
(a) K (b) N (c) R
(d) O (e) P

Directions (31-35): Study the following information carefully and answer the given questions:

Seven persons E, F, G, H, S, T and U buys seven different items viz. Tie, Coat, Ring, Nail paint, Shirt, Diary and Goggles on different days. One person buys one item in a day.

Four person buys items between E and the one who buys Tie. The one who buys coat buys immediately after the one who buys Tie. Two persons buys items between H and the one who buys Tie. T buys immediately after H. F buys his item immediately after the one who buys Diary. Two person buys items between the one who buys coat and the one who buys Shirt. S buys Ring. Goggles was bought immediately after E. Two person buys item between the one who buys Ring and the one who buys Diary. U buys his item before G.

31. Who among the following buys Nail paint?
(a) U (b) G (c) H
(d) T (e) None of These

32. Which item was bought immediately after Shirt?
(a) Diary (b) Goggles (c) Tie
(d) Coat (e) None of These

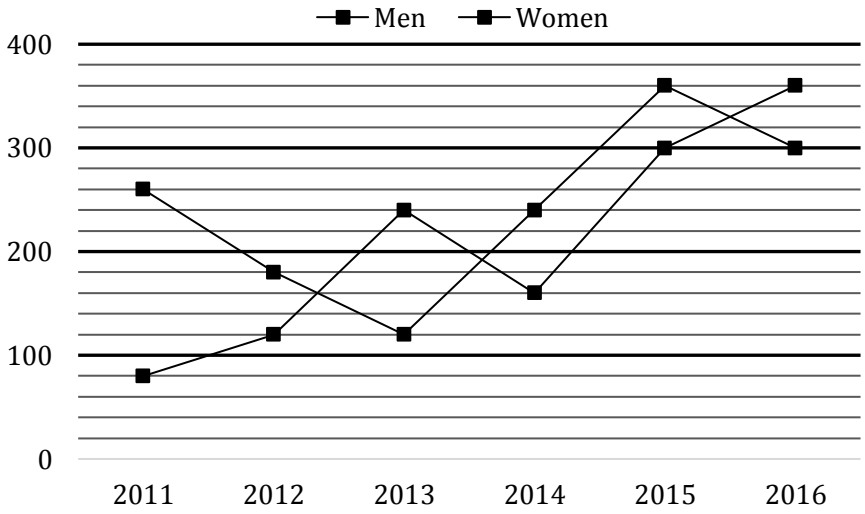
33. How many persons buys items between S and F?
(a) One (b) Two (c) Three
(d) Four (e) None of These

34. Which of the following combination is true?
(a) G- Tie (b) H- Dairy (c) T- Goggles
(d) E- Dairy (e) None is true

35. Who among the following buys item immediately before Ring?
(a) U (b) G (c) H
(d) T (e) None of These

QUANTITATIVE APTITUDE

Direction (36-40):- Line chart given below shows number of labors (men and women) working in six different years. Study the data carefully and answer the following questions.



36. Total number of Men working in 2012 and 2013 together is what percent of the total number of labors (Men + Women) working in 2014?
(a) 60% (b) 70% (c) 80%
(d) 90% (e) 40%

37. Average number of Women working in 2014, 2015 and 2016 together is how much more/less than average number of Men working in 2011, 2014 and 2016 together?
(a) 100 (b) 80 (c) 90
(d) 70 (e) None of the given options

38. Number of Men working in 2017 is 15% more than that of 2015 while number of Women working in 2017 is 40% less than that of 2014. Find total number of labors (Men + Women) working in 2017?
(a) 561 (b) 456 (c) 489
(d) 594 (e) 630

39. Find the ratio between total number of Labors working in 2012 and 2013 together to total number of labors working in 2015 and 2016 together?
(a) 2 : 1 (b) 1 : 2 (c) 35 : 66
(d) 11 : 10 (e)None of the given options

40. Total number of Men working in all six years is how much more/less than total number of Women working in all six years together?
(a) None of the given options
(b) 140 (c) 160
(d) 180 (e) 200

Directions (41-46): Find the wrong number in the following number series:

41. 4, 5.1, 7.3, 10.6, 15, 20, 27.1
(a) 5.1 (b) 4 (c) 7.3
(d) 20 (e) 27.1

42. 2, 3, 8, 31, 154, 924, 6460
(a) 924 (b) 6460 (c) 154
(d) 8 (e) 31

43. 251, 252, 254, 227, 243, 118, 154
(a) 251 (b) 252 (c) 227
(d) 243 (e) 154

44. 141, 156, 147, 162, 153, 165, 159
(a) 156 (b) 153 (c) 147
(d) 165 (e) 159

45. 2, 6, 10, 19, 36, 69, 134
(a) 134 (b) 69 (c) 6
(d) 2 (e) 10

46. 0.5, 2, 1, 4, 32, 512, 16384
(a) 1 (b) 2 (c) 4
(d) 32 (e) 512

47. Ratio of present ages of A and B is 16:7. After 12 years, A's age is twice of B's age then find present ages of A and B?
(a) 64yr; 28yr (b) 80yr; 35yr
(c) None of these (d) 96yr; 42 yr
(e) 102yr; 49yr

48. A man invested a certain sum in scheme A at 15% p.a. for 2 years and earned Rs 1950 as simple interest. He increased his sum by Rs. 'x' and invested in another scheme B at 10% p.a. C.I. for 2 years and received Rs. 1680 as compound interest. Find the value of 'x' ?
(a) Rs. 1750 (b) Rs. 1500 (c) Rs. 1250
(d) None of these (e) Rs. 1850

49. In a class there are 30 girls and 15 boys and total average weight of class is $47\frac{7}{15}$ kg. Total average weight of boys is 58 kg. Find the approximate average weight of girls ?
(a) 32 kg (b) 42 kg (c) 52 kg
(d) 35 kg (e) 50 kg

50. Ram bought a bike at 20% discount on MRP. After 1 year Ram sell the bike to Ramesh at 10% loss. After 1 year more Ramesh sell the bike at 20% profit to Ranjan. If Ranjan paid Rs. 1,29,600, then find the M.R.P. of the bike ?
(a) 1,50,000 (b) 2,25,000 (c) 1,40,000
(d) 2,00,000 (e) 1,80,000

Direction (51-55): There are 450 coupons which can be used in Pedicure and Hair cutting. Ratio between Males to Females who use their coupons in Hair cutting is 13 : 7 Number of males who use their coupons in Pedicure is 72 more than number of females who use their coupon in Hair cutting. Total number of males who use their coupon in Pedicure and Haircutting together is 174 more than total number of females who use their coupon in Pedicure and Haircutting together.

51. Males who use their coupon in Pedicure is what percent of the Males who use their coupons in Haircutting?
(a)200%
(b) 100%
(c)None of the given options
(d) 0%
(e) 150%

52. Find the ratio between Total number persons who use their coupons in Pedicure to total number of persons who use their coupons in Haircutting?
(a) 52 : 23
(b) None of the given options
(c) 8 : 9
(d) 8 : 7
(e) 7 : 8

53. Females who use their coupon in Haircutting is how much more than Females who use their coupon in Pedicure?
(a) 15 (b) 45 (c) 30
(d) None of the given options (e) 60

54. Out of males who use their coupons in Haircutting, 25% belongs to city A, then find number of males who use their coupons in Haircutting which doesn't belongs to city A?
(a) None of the give options (b) 108
(c) 126 (d) 117 (e) 135

55. Ratio between Males who use their coupon in Pedicure to that of in Spa is 4 : 5, while ratio between Females who use their coupon in Haircutting to that of in Spa is 6 : 11. Find total number of people who use their coupons in Spa?
(a) 349 (b) 481 (c) 300
(d) 440 (e) None of the given options

Directions (56-61): In each of these questions, two equations (i) and (ii) are given, you have to solve both the equations and give answer accordingly.

56. (i) $2x^2 + 9x + 9 = 0$
(ii) $15y^2 + 16y + 4 = 0$
(a) $x > y$
(b) $x < y$
(c) $x \geq y$
(d) $x \leq y$
(e) $x = y$ or no relation can be established between x & y.

57. (i) $2x^3 = \sqrt{256}$
(ii) $2y^2 - 9y + 10 = 0$
(a) x = y or no relation can be established between x & y.
(b) x < y
(c) x ≤ y
(d) x ≥ y
(e) x > y

58. (i) $6x^2 - 11x + 4 = 0$
(ii) $3y^2 - 5y + 2 = 0$
(a) x ≤ y
(b) x < y
(c) x ≥ y
(d) x > y
(e) x = y or no relation can be established between x & y.

59. (i) $3x^2 + 11x + 10 = 0$
(ii) $2y^2 + 11y + 14 = 0$
(a) x ≥ y
(b) x ≤ y
(c) x > y
(d) x < y
(e) x = y or no relation can be established between x & y.

60. (i) $12x^2 + 11x + 2 = 0$
(ii) $12y^2 + 7y + 1 = 0$
(a) x ≥ y
(b) x = y or no relation can be established between x & y.
(c) x < y
(d) x ≤ y
(e) x > y

61. (i) $21x^2 + 10x + 1 = 0$
(ii) $24y^2 + 26y + 5 = 0$
(a) x ≤ y
(b) x = y or no relation can be established between x & y.
(c) x ≥ y
(d) x > y
(e) x < y

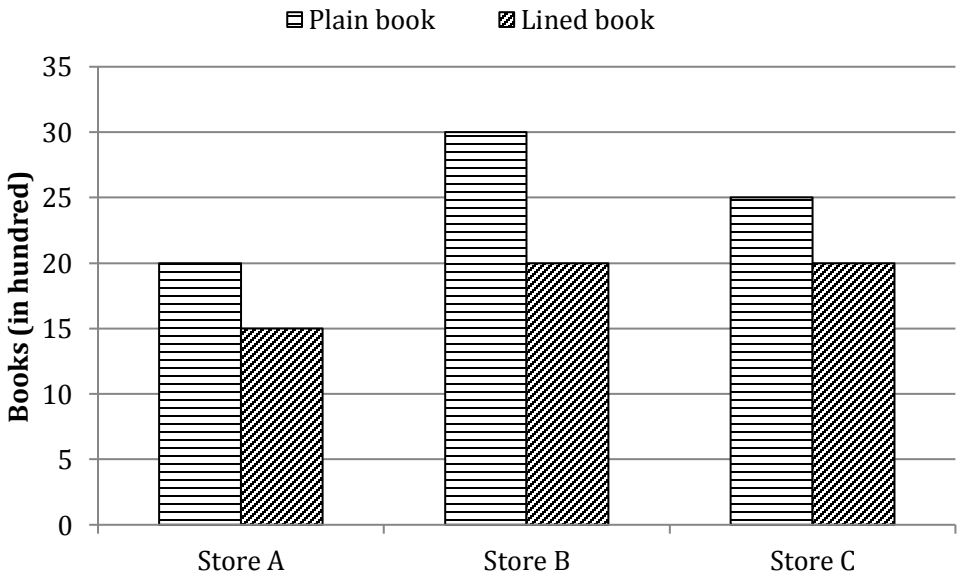
62. 'A' can complete a work in 20 days while B is 25% more efficient than 'A'. B worked for 6 days and left, remaining work is completed by 'C' in 15 days. Find in how many days 'C' can complete the whole work alone?
(a) 27 days (b) 21 days (c)18 days
(d) 24 days (e) 30 days

63. A man travels from Point P to Q with 90 km/hr and from Q to R with 60 km/hr. Total distance between P to R is 200 km. If his average speed is 75 km/hr then find the distance between P and Q?
(a) 80 km
(b) 120 km
(c) 100 km
(d) 150 km
(e) None of the given options

64. A mixture contains wine and water in the ratio 5 : 1. On adding 5 litre of water, the ratio of wine to water becomes 5 : 2. The quantity of wine in the mixture is ?
(a) 20 ℓ (b) 22 ℓ (c) 24 ℓ
(d) 26 ℓ (e) None of these

65. The average salary of the entire staff in an office is Rs 3200 per month. The average salary of officers is Rs 6800 and that of non-officers is Rs 2000. If the number of officers is 5, then find the number of non-officers in the office?
(a) 8 (b) 12 (c) 15
(d) 5 (e) None of these

Directions (66-70): Given bar graph shows the number of plain books and lined books (in hundreds) available at three different stores and the table shows the percentage of total books (Plain + lined) that was sold by different stores.



Stores	% of sold books
A	20%
B	40%
C	30%

66. The number of plain books sold by store A and store B was 30% and 40% respectively then find number of lined books sold by store A and store B together is what percent of total books available at store A ?
(a) $22\frac{6}{7}\%$ (b) $23\frac{4}{7}\%$ (c) $25\frac{5}{7}\%$
(d) 25% (e) None of these

67. Average of total books sold by stores B and C together is how much more than total unsold books of store A.
(a) 1125 (b) 1075 (c) 1055
(d) 1175 (e) 1225

68. Ratio of sold plain and lined books for store C is 5 : 4 and for store B is 3 : 2. Then find the total plain books sold by these two stores together?
(a) 1750 (b) 1825 (c) 1850
(d) 1950 (e) 1975

69. Unsold books of store A is approximately is what percent more or less than total unsold books of store B and C together.
(a) 48% (b) 54% (c) 59%
(d) 52% (e) 57%

70. Selling price of each plain books and lined books sold by store B is Rs. 250 and Rs. 175 respectively. Then, find the total amount earned by store B on selling these books if 60% of lined books are sold by the store ?
(a) Rs. 2.5 lac (b) Rs. 3.6 lac (c) 3.5 lac
(d) 3.8 lac (e) 4.1 lac

ENGLISH LANGUAGE

Direction (71-80): Read the following passage carefully and answer the questions given below it. Certain words are given in bold to help you locate them while answering some of the questions.

The effects of the worst economic **downturn** since the Great Depression are forcing changes on state governments and the U.S. economy that could linger for decades. By one Federal Reserve estimate, the country lost almost an entire year's worth of economic activity – nearly $14 trillion – during the recession from 2007 to 2009.The deep and **persistent** losses of the recession forced states to make broad cuts in spending and public workforces. For businesses, the recession led to changes in expansion plans and worker compensation. And for individual Americans, it has meant a future postponed, as fewer buy houses and start families. Five years after the financial crash, the country is still struggling to recover." In the aftermath of [previous] recessions there were strong recoveries. That is not true this time around," said Gary Burtless, a senior fellow at the Brookings Institution. "This is more like the pace getting out of the Great Depression." For years, housing served as the backbone of economic growth and as an investment opportunity that propelled generations of Americans into the middle class.

But the financial crisis burst the housing bubble and devastated the real estate market, leaving millions facing **foreclosure**, millions more underwater, and generally stripping Americans of years' worth of accumulated wealth. Anthony B. Sanders, a professor of real estate finance at George Mason University, said even the nascent housing recovery can't escape the effects of the recession. Home values may have rebounded, he said, but the factors driving that recovery are very different than those that drove the growth in the market in the 1990s and 2000s. Sanders said more than half of recent home purchases have been made in cash, which signals investors and hedge funds are taking advantage of cheap properties. That could freeze out average buyers and also means little real economic growth underpins those sales. Those effects are clear in homeownership rates, which continue to decline. In the second quarter of this year, the U.S. homeownership rate was 65.1%, according to Census Bureau data, the lowest since 1995. In the mid-2000s, it topped 69%, capping a steady pace of growth that began after the early 1990s recession. Reversing that will be a challenge, in part because credit has tightened and lending rules have been toughened in an effort to avoid the mistakes that inflated the housing bubble in the first place.

"Credit expanded, and now contracted, and it's going to be tight like this as far as the eye can see," Sanders said. "We so destroyed so many households when the bubble burst, there's just not the groundswell to fill the demand again." Some are **skeptical** that the tight credit market and new efforts to regulate the financial markets, like the Dodd-Frank law, will prove lasting. Americans have often responded with calls for regulation after financial sector-driven crises and accusations of mismanagement, according to Brookings' Burtless. "But eventually, those fires cool down," he said. "It's not as though this memory of what can go wrong sticks with us very long." That can be seen in the intense efforts to water down Dodd-Frank's regulations, Burtless said. Federal regulators have already made moves to relax requirements for some potential

homeowners who were victims of the recent housing crisis. Even those steps and an unlikely return to easy credit might not fuel a full housing recovery without economic growth to back it up. As Sanders, referring to the growth in low-wage and part-time employment, put it: "At those wages, it's tough to scramble together down payments and mortgages."

Turmoil in the housing market has already reshaped the makeup of households nationwide. Homeownership rates among people with children under 18 fell sharply during the recession, declining 15% between 2005 and 2011, according to Census Bureau data. In some states it was far worse. For Michigan, the decline in homeownership was 23%, and in Arizona and California it was 22%. Lackluster job growth has outlived the downturn. A study by the Economic Policy Institute showed wages for all workers, when adjusted for inflation, grew just 1.5% between 2000 and 2007. But the last five years wiped out even those modest gains—the study found wages declined for the bottom 70% of all workers since the recession began. However, some areas have seen manufacturing jobs climb back from recessionary lows, and the energy sector has been a boon for some Midwestern states. One hopeful sign for workers is the shift away from manufacturing growth in the typically low-wage South back toward the Rust Belt states, reversing a movement that was taking hold before the downturn. That trend is documented in a 2012 report from the Brookings Institution, "Locating American Manufacturing: Trends in the Geography of Production."

From 2000 to 2010, both the Midwest and South lost manufacturing jobs at about the national rate of 34%. But the Midwest has seen nearly half of all manufacturing jobs gained since 2010, almost double the increase in the South. For Michigan, the growth was 19%; in Indiana, 12%. Even with that growth, there are caveats. Autoworker unions have ceded ground with companies on wages and benefits, for example, allowing new hires to work for lower pay and fewer benefits than those who've held their jobs longer. Unemployment remains stubbornly high in some states, and the jobs created have leaned heavily toward part-time and low-pay work. A study from the San Francisco Federal Reserve found the proportion of U.S. jobs that are part-time is high, as many of the jobs lost during the recession have not returned.

71. How, according to the passage, plunge in the economy devastated the life of the Americans?
(a) it has led to huge loss of revenues amounting almost $14 trillion
(b) due to degrading economy there has been voluminous cuts in spending
(c) it has led to a wide scale increase in the number of people buying homes.
(d) both (a) and (b)
(e) All of the above

72. What can be sighted as the prime cause of this economic slump?
(a) changes in expansion plans and worker compensation.
(b) the expansion in the Credit which has upheld the investment in manufacturing sector
(c) the tight credit market which has resulted in the decline of real estate business
(d) deregulation of the financial markets which has slowed down the economy
(e) mismanagement of funds has led to huge confusion among the citizens

73. Why have been the employers preferring part time jobs to regular full time jobs since the downfall in economy?
(I) to downslide the debt curtailed over the organizations
(II) so that more number of jobs can be raised from a single job
(III) because lots of jobs lost during the recession have not returned yet
(a) Only (I)
(b) Only (III)
(c) Both (II) and (III)
(d) Both (I) and (III)
(e) None is true

74. Home ownership has drastically decreased since the economic downturn. Explain.
(a) because of the changes made in the Credit laws
(b) due to the sudden shift in the nature of the federal towards the middle class Americans
(c) due to sudden losss incurred in the real estate business of a large number of people
(d) because people are making broad cuts in their spending
(e) None of these

75. Which of the following statements is/are NOT TRUE in the context of the passage?
(a) federals are tightening the lending rules to avoid mistakes which inflated housing bubble lately
(b) the U.S. economy could linger for decades due to this economic recession
(c) there has been steep increase in low pay work to reduce unemployment slowly but steadily
(d) even after a decade of the financial crash, the country is still struggling to recover
(e) None of these

76. Which of the following is the most suitable title for the passage?
(a) The economic downturn
(b) The economic paralysis
(c) 2008 financial crisis impact still hurting states
(d) The upsurge in unemployment
(e) The declining economy

Directions (77-78): Choose the word/group of words which is most similar in meaning to the word/group of words printed in bold as used in passage.

77. Downturn
(a) operose (b) aeonian (c) abetment
(d) descent (e) procurement

78. Persistent
(a) merciful (b) tenacious (c) intermittent
(d) relenting (e) yielding

Directions (79-80): Choose the word/group of words which is most opposite in meaning to the word/group of words printed in bold as used in passage.

79. Foreclosure
(a) preclude (b) legalize (c) deprive
(d) allow (e) prevent

80. Skeptical
(a) dubious (b) dissenting (c) convinced
(d) cynical (e) doubted

Direction (81-90): Which of the following phrases (I), (II), and (III) given below each sentence should replace the phrase printed in bold letters to make the sentence grammatically correct? Choose the best option among the five given alternatives that reflect the correct use of phrase in the context of the grammatically correct sentence. If the sentence is correct as it is, mark (e) i.e., "No correction required" as the answer.

81. Every Open House we held since 2013 reaffirmed our belief that there is a need for human intervention **to retain its trust and credibility over the age of** anonymous communication.
(I) to retain trust and credibility in this age of
(II) to retaining trust and credibility ageing
(III) for retention of trust and credible age of
(a) Only (I) is correct
(b) Only (III) is correct
(c) Both (I) and (II) are correct
(d) Both (II) and (III) are correct
(e) No correction required

82. How it is possible for a multi-edition newspaper to produce completely different newspapers for various cities?
(I) Is it possible for
(II) Does it possible to
(III) How is it possible for
(a) Only (I) is correct
(b) Only (II) is correct
(c) Only (III) is correct
(d) Both (I) and (III) are correct
(e) No correction required

83. It is a process where continuity and change **are in consonance with each other**, where the introduction of a new segment does not subsume the importance of the existing segments.
(I) is in consonance with one another
(II) are in consonant to one another
(III) is in consonance at each other
(a) Only (I) is correct
(b) Only (II) is correct
(c) Both (I) and (III) are correct
(d) Both (II) and (III) are correct
(e) No correction required

84. With cyberspace giving an opportunity to many to express themselves, the question that remains unanswered is whether their voices are heard?
(I) As cyberspace might be giving
(II) While cyberspace may have given
(III) Although cyberspace has given
(a) Only (I) is correct
(b) Only (II) is correct
(c) Both (I) and (III) are correct
(d) Both (II) and (III) are correct
(e) No correction required

85. The "Hermit Kingdom" is increasingly **isolating itself because of its** nuclear ambition that threatens its neighbourhood and the world at large.
(I) isolated because of
(II) isolating themselves because of
(III) isolated themselves because of their
(a) Only (I) is correct
(b) Only (II) is correct
(c) Only (III) is correct
(d) Both (I) and (II) are correct
(e) No correction required

86. Pointing out the benefits of the GST within a month of its implementation, Modi said that goods are being transported much faster, highways have become clutter-free and pollution levels **had gone down and increased** speed of trucks.
(I) are being lowered with the decreased
(II) have come down with the increased
(III) have been lowered because of decreasing
(a) Only (I) is correct
(b) Only (II) is correct
(c) Only (III) is correct
(d) Both (I) and (II) are correct
(e) No correction required

87. Washing your hands at regular intervals **could be the most effective method to staying** healthy and protecting yourself from various ailments.
(I) is the most effective way of staying
(II) can be the most effective way to stay
(III) has the effective effect to stay
(a) Only (I) is correct
(b) Only (II) is correct
(c) Both (I) and (III) are correct
(d) All are correct
(e) No correction required

88. Quite a few research institutes **are growing in free India bearing the names of** scientists winning recognition of Western countries, mainly Europe.
(I) has grown in free India which bears the names of
(II) have grown up in free India that bears the names of
(III) grew up in free India bearing the names of
(a) Only (I) is correct
(b) Only (II) is correct
(c) Only (III) is correct
(d) Both (II) and (III) are correct
(e) No correction required

89. Southeast Asian countries today are far more integrated than they have ever been in the modern history of the region, **but ASEAN has some way to go** before it can call itself a real community.
(I) though ASEAN has something to do
(II) as ASEAN has some places to go
(III) while ASEAN has to go some other way
(a) Only (I) is correct
(b) Both (I) and (II) are correct
(c) Both (II) and (III) are correct
(d) All are correct
(e) No correction required

90. The success of Mithali's squad has generated fresh interest in the women's game in India, and **as various goodies have been dangled** many are calling for a female equivalent of the IPL.
(I) besides various goodies being dangled
(II) various goodies are being dangled
(III) apart from various goodies being dangled
(a) Only (I) is correct
(b) Both (I) and (II) are correct
(c) Both (I) and (III) are correct
(d) All are correct
(e) No correction required

Direction (91-100): Below in each questions some sentences are given, find the sentence which is not really contributing to the main theme and the of the passage or find the odd sentence out and rearrange the remaining sentences to make a coherent paragraph. If the given sentence is correct as it is then choose option (e). If the sequence is the one which is not given then choose option (d) as your choice.

91. (A) keep their inner life (B)/ Tightly under control (C)/ Educational institutions seldom serve as precise mirrors (D)/Of historical change because pedagogic and administrative rituals (E)/ That have nicely preserved an empty shell of a special inherited identity
(a) CEDB (b) CDEB
(c) CDAB (d) None of these
(e) No correction required

92. (A)Most importantly the labour market'(B)/We can expect to see continued spillovers (C)/Into other areas of the economy, (D)/Combined with a 'broader unravelling of credit markets, (E)Parliament should act quickly to keep the economy from stalling
(a) DECA (b) DEAC (c) ECBD
(d) None of these (e) No correction required

93. (A) And act judiciously to bring the economy back on track(B)/The start-up ecosystem cannot progress in a disturbed business cycle(C)/The economy appears to be in a shambles(D)/ Leaders in the government are failing to recognise the pessimism(E)/ And despite the gloomy forecasts for the future,
(a) DAEB (b) BEDA (c) CEDA
(d) None of these (e) No correction required

94. (A)Even at the risk of reducing an appraisal(B)/ It strove to make this evident, (C)/Of a great writer such as Ishiguro to a trite high school essay (D)/While announcing the name, (E)/ That came its way last year
(a) DBAC (b) ACBE (c) DCBE
(d) None of these (e) No correction required

95. (A) But laws do have the utility value (B) To heed the line between religious traditions and superstitious practices (C) Of curbing the prevalence of inhuman rituals and practices (D) To eradicate superstition from society,(E) Mere legislation is not enough
(a) EBAC (b) DEBA (c) EDAC
(d) None of these (e) No correction required

96. (A) As the LTTE displaced the other Tamil militias and became dominant, (B) To its ambition of a separate state (C)The abuses perpetrated by the warring actors (D) They boldly challenged its political choices, (E) Which, they felt, subordinated the well-being of the Tamil people
(a) CEDB (b) DABE (c) ADEB
(d) None of these (e) No correction required

97. (A)Are expected to bring their regional expertise(B)/ Are in the exclusive domain of the Union government, (C)/ The successful outcome of a request made by the Kerala Chief Minister (D)/ Has been widely applauded(E)/Although traditionalists may argue that foreign affairs
(a) EBCD (b) CDEA (c) EACD
(d) None of these (e) No correction required

98. (A) It is this crucial human health angle (B)/ That has spawned a mushrooming body of science centred (C)/ On understanding the linkages between sleep and normal metabolic activity, (D)/ And the potentially deleterious effect of sleep deprivation (E)/ That helped complete the jigsaw puzzle
(a) CABD (b) ABCE (c) AEBC
(d) None of these (e) No correction required

99. (A) Has to give way to (B)/ Avert accidents (C)/ At the cost of maintenance and safety (D)/ The present system of running trains on a congested network (E)/ Safety consciousness in operations
(a) DCAE (b) EABC (c) DCAB
(d) None of these (e) No correction required

100. (A) It is increasingly manifested in their converging interests (B)/To invest in greater coordination security cooperation (C)/ to ensure Eurasian connectivity plans (D) that are truly multilateral, (E) and also financially and environmentally sustainable.
(a) ACDE (b) ADCE (c) BACE
(d) None of these (e) No correction required

Solutions

REASONING ABILITY

Directions (1-5):

T
R
X
Q
S
W
U
P
V

1. (e); 2. (d); 3. (c);

4. (d); 5. (e);

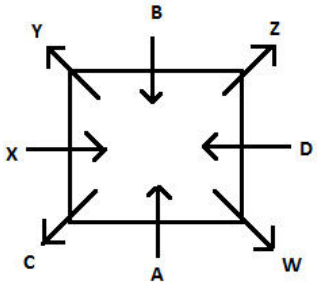
Direction (6-10):

Words	Code
Venue	rs
Details	wi
Get	fe
For	mo
Guest	ra
book/ required	gt/rd
More	gk

6. (c); 7. (c); 8. (b);

9. (d); 10. (e);

Direction (11-15):



11. (d); 12. (a); 13. (c);

14. (d); 15. (c);

Direction (16-20):

16. (c); I. K<X (false) **II.** W>M(false)

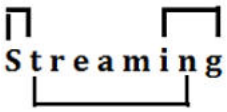
17. (b); I. Z<Y (True) **II.** S>Q (false)

18. (c); I. K≥M(false) **II.** P>M(false)

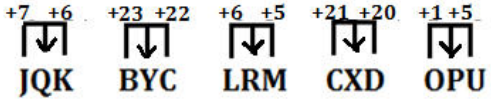
19. (e); I. M≥U (True) **II.** G>Z(True)

20. (d); I. J>B(True) **II.** H<R(false)

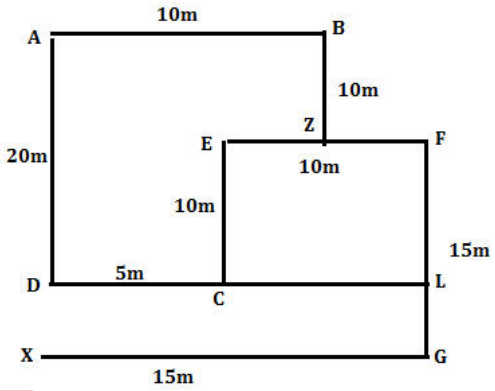
21. (c);



22. (e);

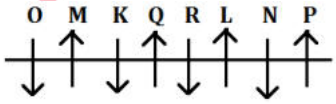


Direction (23-25):



23. (a); 24. (c); 25. (a);

Directions (26-30):



26. (c); 27. (c); 28. (a);

29. (a); 30. (e);

Direction (31-35):

Person	Items
U	Tie
G	Coat
S	Ring
H	Nail paint
T	Shirt
E	Diary
F	Goggles

31. (c); 32. (a); 33. (c);

34. (d); 35. (b);

QUANTITATIVE APTITUDE

36. (d); Required % = $\frac{120+240}{160+240}\times100=\frac{360}{400}\times100=90\%$

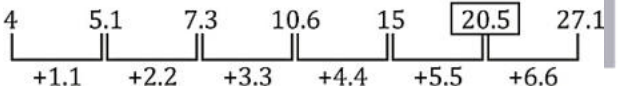
37. (a); Average number of Women working in 2014, 2015 and 2016 together
$=\frac{1}{3}[240+360+300]=\frac{900}{3}=300$
Average number of Men working in 2011, 2014 and 2016 together $=\frac{1}{3}[80+160+360]$
$=\frac{600}{3}=200$
Required difference = 300−200 = 100

38. (c); Number of Men working in 2017
$=\frac{115}{100}\times300=345$
Number of Women working in 2017
$=\frac{60}{100}\times240=144$
Total number of labors working in 2017
= 345 + 144 = 489

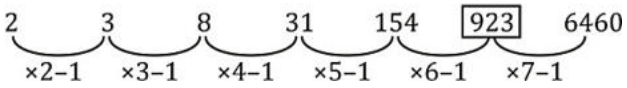
39. (b); Required Ratio = $\frac{(120+180)+(240+120)}{(300+360)+(360+300)}$
$=\frac{300+360}{660+660}=\frac{660}{1320}=\frac{1}{2}$

40. (e); Total number of Men working in all six years = 80 + 120 + 240 + 160 + 300 + 360 = 1260
Total number of Women working in all six years
= 260 + 180 + 120 + 240 + 360 + 300 = 1460
Required difference = 1460 − 1260 = 200

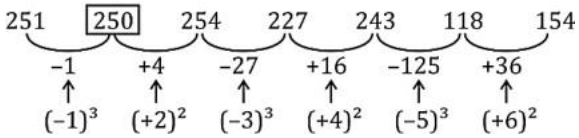
41. (d);



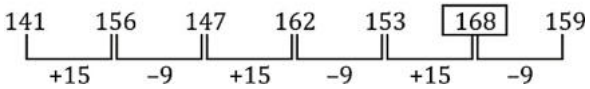
42. (a);



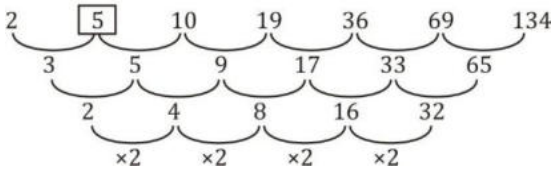
43. (b);



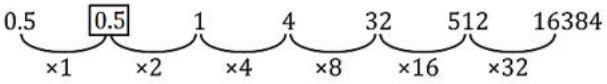
44. (d);



45. (c);



46. (b);



47. (d); Let present age of A and B be 16x yr and 7x yr respectively
ATQ
$\frac{16x+12}{7x+12}=\frac{2}{1}$
$\Rightarrow 2x=12\Rightarrow x=6$
Present age of A=96 yr
Present age of B= 42 yr

48. (b); $sum=\frac{1950\times100}{2\times15}$ =Rs 6500
CI in 2 years at 10% per annum
$=10+10+\frac{10\times10}{100}=21\%$
ATQ
$(6500+x)\times\frac{21}{100}=1680$
$\Rightarrow(6500+x)=8000$
$x=Rs1500$

49. (b); Total weight of students = $47\frac{7}{15}(15+30)$
= 2136 kg
Total weight of boys = 15× 58 = 870 kg
Average weight of girls = $\left(\frac{2136-870}{30}\right)$ kg = 42.2 kg
≃ 42 kg

50. (a); $Ram's\ cost\ price=M.R.P.\times\frac{80}{100}$
$Ramesh\ C.P.=M.R.P.\times\frac{80}{100}\times\frac{90}{100}$
$Ranjan\ C.P.=M.R.P.\times\frac{80}{100}\times\frac{90}{100}\times\frac{120}{100}$
= 1,29,600
⇒ M.R.P. = Rs. 1,50,000

Direction (51-55) :- Let, Males and females who use their coupons in Haircutting be 13x and 7x respectively.
⇒ Males who use their coupons in Pedicure
$=7x+72$
Then Females who use their coupons in Pedicure
$=450-13x-7x-7x-72=378-27x$

Pedicure		Haircutting	
Males	**Females**	**Males**	**Females**
7x+72	378-27x	13x	7x

ATQ,
$7x+72+13x-(7x+378-27x)=174$
40x–306=174
40x = 480
X =12

Pedicure		Haircutting	
Males	**Females**	**Males**	**Females**
156	54	156	84

51. (b); Required % = $\frac{156}{156} \times 100 = 100\%$

52. (e); Required Ratio = $\frac{156+54}{156+84} = \frac{210}{240} = \frac{7}{8}$

53. (c); Required difference = $84 - 54 = 30$

54. (d); Number of males who use their coupons in Haircutting which doesn't belongs to city A
$= 156 \times \frac{75}{100} = 117$

55. (a); Males who use their coupons in Spa
$= 156 \times \frac{5}{4} = 195$
Females who use their coupons in Spa
$= 84 \times \frac{11}{6} = 154$
Total number of people who use their coupon in Spa = $195 + 154 = 349$

56. (b); (i) $2x^2 + 9x + 9 = 0$
$2x^2 + (6 + 3)x + 9 = 0$
$2x(x + 3) + 3(x + 3) = 0$
$x = \frac{-3}{2}, -3$

(ii) $15y^2 + 16y + 4 = 0$
$15y^2 + 10y + 6y + 4 = 0$
$5y(3y + 2) + 2(3y + 2) = 0$
$y = \frac{-2}{5}, \frac{-2}{3}$
$x < y$

57. (c); (i) $2x^3 = 16$
$x^3 = 8$
$x = 2$

(ii) $2y^2 - 9y + 10 = 0$
$2y^2 - (5 + 4)y + 10 = 0$
$2y^2 - 5y - 4y + 10 = 0$
$y(2y - 5) - 2(2y - 5) = 0$
$y = 2, \frac{5}{2}$
$x \leq y$

58. (e); (i) $6x^2 - 11x + 4 = 0$
$6x^2 - (8 + 3)x + 4 = 0$
$6x^2 - 8x - 3x + 4 = 0$
$2x(3x - 4) - 1(3x - 4) = 0$
$x = \frac{1}{2}, \frac{4}{3}$

(ii) $3y^2 - 5y + 2 = 0$
$3y^2 - (3 + 2)y + 2 = 0$
$3y^2 - 3y - 2y + 2 = 0$
$3y(y - 1) - 2(y - 1) = 0$
$y = ⅔, 1$
No relation between x and y

59. (a); (i) $3x^2 + 11x + 10 = 0$
$3x^2 + 6x + 5x + 10 = 0$
$3x(x + 2) + 5(x + 2) = 0$
$x = -2, \frac{-5}{3}$

(ii) $2y^2 + 11y + 14 = 0$
$2y^2 + 7y + 4y + 14 = 0$
$y(2y + 7) + 2(2y + 7) = 0$
$y = -2, -\frac{7}{2}$
$x \geq y$

60. (b); (i) $12x^2 + 8x + 3x + 2 = 0$
$4x(3x + 2) + 1(3x + 2) = 0$
$x = \frac{-2}{3}, \frac{-1}{4}$

(ii) $12y^2 + 7y + 1 = 0$
$12y^2 + 4y + 3y + 1 = 0$
$4y(3y + 1) + 1(3y + 1) = 0$
$y = \frac{-1}{3}, \frac{-1}{4}$
No relation between x and y

61. (b); (i) $21x^2 + 10x + 1 = 0$
$21x^2 + 7x + 3x + 1 = 0$
$7x(3x + 1) + 1(3x + 1) = 0$
$x = \frac{-1}{3}, \frac{-1}{7}$

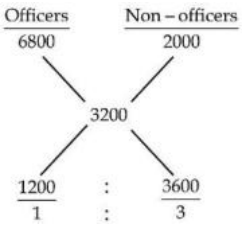
(ii) $24y^2 + 26y + 5 = 0$
$24y^2 + (20 + 6)y + 5 = 0$
$24y^2 + 20y + 6y + 5 = 0$
$4y(6y + 5) + 1(6y + 5) = 0$
$y = \frac{-5}{6}, -\frac{1}{4}$
No relation between x and y

62. (d); B can complete work alone in = $20 \times \frac{4}{5} = 16$ days
Let C alone can complete work in 'x' days
ATQ,
$\frac{6}{16} + \frac{15}{x} = 1$
$\Rightarrow \frac{15}{x} = \frac{10}{16} \Rightarrow x = \frac{15 \times 16}{10} = 24\ days$

63. (b); Let distance between P to Q and Q to R be 'x' and 'y' respectively.
ATQ, $75 = \frac{200}{\frac{x}{90} + \frac{y}{60}}$
$60x + 90y = 200 \times 90 \times 60 \times \frac{1}{75}$
$2x + 3y = 480$
And $x + y = 200$
$\Rightarrow x = 120km\ and\ y = 80km$

64. (e); Let wine and water are = $5x : x$
$Now, \frac{5x}{x+5} = \frac{5}{2} \Rightarrow 10x = 5x + 25$
$x = 5$
$\Rightarrow$ $25 : 5$ | $25 : 10$
$Before\ mixture$ | $After\ mixture$
Quantity of wine = 25ℓ

65. (c);



No. of non-officers = $\frac{3}{1} \times 5 = 15$

66. (c); Total books sold by store A = $3500 \times \frac{20}{100}$
= 700
Total plain books sold by store A
= $2000 \times \frac{30}{100} = 600$
Total lined books sold by store A
= 700 – 600 = 100
Total books sold by store B
= $5000 \times \frac{40}{100} = 2000$
Plain books sold by store B
= $3000 \times \frac{40}{100} = 1200$
Total lined books sold by store B
= 2000 – 1200 = 800
Required % = $\frac{900}{3500} \times 100 = \frac{180}{7}\% = 25\frac{5}{7}\%$

67. (a); Average of total books sold by stores B and C
$= \frac{1}{2}\left(50 \times \frac{40}{100} \times 100 + 45 \times \frac{30}{100} \times 100\right)$
= 1675
Unsold books of store A = $3500 \times \frac{80}{100} = 2800$
Required difference = 2800 – 1675 = 1125

68. (d); Total books sold by store C = $45 \times 100 \times \frac{30}{100}$
= 1350
Plain books sold by C = $1350 \times \frac{5}{9} = 750$
Plain books sold by store B = $\frac{3}{5} \times 5000 \times \frac{40}{100}$
= 1200
Required number of books = 1200 + 750
= 1950

69. (b); Unsold books of store A
= $3500 \times \frac{80}{100} = 2800$
Unsold books of store B and C together
= $5000 \times \frac{60}{100} + 4500 \times \frac{70}{100} = 6150$
Required % = $\frac{6150-2800}{6150} \times 100 = 54\%$

70. (e); Number of total books sold by store B
= $5000 \times \frac{40}{100} = 2000$
Number of lined books sold
= $2000 \times \frac{60}{100} = 1200$
Total amount earned = Rs. (800 × 250 + 1200 × 175) = Rs. 4.1 lac

ENGLISH LANGUAGE

71. (d); Refer to paragraph1, it is clearly mentioned that due to the degrading economy the states have made a cut on spending and public workforces. Also there has been a sudden decrease in the number of people buying homes or starting families. Hence both the options (b) and (c) are correct.

72. (d); Read paragraph4 carefully, it is mentioned that the Americans have often responded with calls for regulation after the financial sector-driven crises and have been accused of mismanagement. Hence deregulation is the major cause of this economic slump.

73. (b); Refer to paragraph5 of the passage, it is evident that many of the jobs lost during the recession have not returned and due to that there has been a gradual increase in low wage and part-time jobs. Hence (b) is the correct choice.

74. (e); From the paragraph 2, we can easily infer that there is a decline in home ownership over the years as even in the second quarter of the year, the U.S. homeownership rate was 65.1%, which is the lowest since 1995 as in the mid-2000s it topped with 69%. Hence none of the options is correct in the context of the passage.

75. (d); Read the passage, it is nowhere explicitly mentioned that after a decade of financial crash the economy is struggling to recover, so statement (d) is clearly incorrect as it doesn't relate to the content of the passage. Hence (d) is the correct option.

76. (c); In the context of the passage, option(c) will be the apt title as it relates to the content of the above passage.

77. (d); **Downturn** means a decline in economic, business, or other activity.
Operose means involving or displaying much industry or effort.
Aeonian means eternal; everlasting
Abetment means to encourage, support, or countenance by aid or approval, usually in wrongdoing
Descent means an act of moving downwards, dropping, or falling
Procurement means the action of obtaining or procuring something.
Hence **descent** has the similar meaning as **downturn**.

78. (b); **Persistent** means continuing to exist or occur over a prolonged period
Merciful means compassion or forgiveness shown towards someone whom it is within one's power to punish or harm
Tenacious means persisting in existence; not easily dispelled
Intermittent means occurring at irregular intervals; not continuous or steady.
Relenting means become less severe or intense.
Yielding means not hard or rigid.
Hence **tenacious** has similar meaning as **persistent**.

79. (d); **Foreclosure** means Legal process by which a lender cancels (forecloses) a borrower's right of redemption of the mortgaged property through a court order (called foreclosure order).
Preclude means prevent from happening; make impossible.
Legalize means make (something that was previously illegal) permissible by law.
Deprive means prevent (a person or place) from having or using something.
Allow means let (someone) have or do something
Hence **allow** will be the exact opposite of **foreclosure**.

80. (c); **Skeptical** means not easily convinced; having doubts or reservations.
Dubious means hesitating or doubting.
Dissenting means hold or express opinions that are at variance with those commonly or officially held
Convinced means completely certain about something.
Cynical means distrustful of human sincerity or integrity.
Hence **convinced** will be the exact opposite of **skeptical**.

81. (a); "to retain trust and credibility in this age of" is the correct phrase to make the sentence grammatically correct. If we go by the options considering their grammar syntax, only option (I) fits into the sentence perfectly adding the required meaning to the sentence. Moreover, "in this age of anonymous communication" is the correct phrase usage which means "in this distinct period of anonymous communication". Hence (a) is the correct option.

82. (d); "Is it possible for" is the correct phrase to make the sentence grammatically correct. In the given sentence, the phrase "How it is" is incorrect as the sentence is Interrogative. Thus the correct phrase should be "How is it possible for." It is to be noticed that the sentence is in Simple Present Tense. Thus both (I) and (III) are the correct phrases that may replace the phrase given in bold to make the sentence grammatically correct. Hence (d) is the correct option.

83. (e); The given sentence is grammatically correct as the plural verb "are" is used in accordance to its plural subjects "continuity and change". Moreover, the phrase "with each other" is used to frame a relation with the two. Hence the sentence doesn't require any correction. The three given phrases in the options make no relevant substitution to the phrase given in bold in the sentence as they do not follow the correct grammar syntax required for the sentence. Hence (e) is the correct option.

84. (d); "While cyberspace may have given" is the correct phrase to make the sentence grammatically correct. First of all, it is to be noted that the sentence is conditional as the second part of the sentence is dependent on the first part. When we consider options provided, option (I) can be easily eliminated as the use of "As" or "Since" is incorrect in this case ("As/Since" is generally used to express the cause of its dependent clause). Moreover, "while" is the correct usage as it means "in spite of the fact that; although". Thus both the phrases (II) and (III) provide the grammatically correct and meaningful sentences. Hence (d) is the correct option.

85. (e); The given sentence is grammatically correct as the sentence is not in Passive form. It clearly follows the syntax of Present Continuous Tense and the use of reflexive pronoun "itself" is correct as it is used for the subject "The Hermit Kingdom". Moreover, the three phrases given in options do not follow the correct structure required for the sentence to make it grammatically correct. Hence (e) is the correct option.

86. (b); "have come down with the increased" is the correct phrase to make the sentence grammatically correct as the sentence is in Present Tense. It is to be noticed that the speed of

trucks can't be decreased as it is clearly mentioned that the highways have become clutter-free. Thus the options (I) and (III) can be easily eliminated. Also, the phrasal verb "come down" means collapse or be demolished. Hence (b) is the correct option.

87. (a); "is the most effective way of staying" is the correct phrase to make the sentence grammatically correct as the sentence is in generalized and factual form. Thus the use of "could" or "can" is incorrect in this case. Moreover, the phrases connected with the conjunction "and" should be in similar form. Thus among the given options, only option (I) has the correct grammar structure to correctly fit into the sentence. Hence (a) is the correct option.

88. (c); "grew up in free India bearing the names of" is the correct phrase to make the sentence grammatically correct as the sentence refers to the event related to the past. If we go by the options, options (I) and (II) are not in accordance with correct grammar structure. Only option (III) possesses correct syntax to supplement its usage in the sentence. The phrasal verb "grew up" means became an adult. Hence (c) is the correct choice.

89. (e); The given sentence is grammatically correct. It is to be noted that the sentence is not conditional and thus all the given options are incorrect. Hence (e) is the correct option.

90. (c); "apart from various goodies being dangled" is the correct phrase to make the sentence grammatically correct. Option (II) can be easily eliminated as it lacks the correct syntax. Option (I) also fits into the sentence quite correctly as it adds similar meaning to the sentence. The phrasal verb "apart from" means in addition to; besides; as well as. Thus the phrase (I) also provides a grammatically correct sentence. Hence (c) is the correct option.

91. (c); **CDAB** is the correct sequence.
Sentence (E) is the one which is the odd one out.

92. (e); The correct sequence is **DBCA.**
Sentence E is the odd one out.

93. (c); CEDA is the correct choice.
Sentence (B) is odd one out and is not a part of this coherent paragraph.

94. (a); DBAC is the correct choice.
Sentence E is the one which is the odd one out.

95. (c); EDAC is the correct sequence.
Sentence B is the odd one out.

96. (c); ADEB is the correct sequence
Sentence C is the odd one out.

97. (a); EBCD is the correct sequence.
Sentence A is the odd one out.

98. (e); ABCD is the correct sequence.
Sentence E is the odd one out.

99. (a); DCAE is the correct sequence
Sentence B is the odd one out.

100. (a); ACDE is the correct sequence.
Sentence B is the odd one out

REASONING ABILITY

Direction (1-5): Read the following information carefully and answer the questions given below.

L, M, N, O, P, R and Q are seven employees who are working in the same company. They attend meeting in different department viz; administrative, Security, Finance and HR department on different days from Monday to Sunday but not necessarily in the same order. One employee attends only one meeting and only one meeting is held on each day. There are two employees who attend meeting in administrative, security, HR department and only one employee attends meeting in Finance department.

L attends meeting on Thursday. There are two persons who attend meeting between L and the person who attends meeting in HR department. There are three persons who attend meeting between the persons who attend meeting in Administrative department and the one who attends meeting in Finance department. The one who attends meeting in administrative department attends before the one who attends in finance department. The one who attends meeting in finance department does not attend on Saturday. The number of persons who attend meeting between L and the one who attend meeting in finance department is same as the number of persons who attend meeting between O and the one who attends meeting in security department. The one who attends meeting in security department attend before O.O does not attend meeting in HR department. Q attends meeting on the day immediately before the day on which L attends meeting. O does not attend meeting on the day just after the day on which L attends meeting. The number of persons who attend meeting between L and P is same as the number of persons who attend meeting between L and R.P attends meeting in one of the day before the day on which R attends meeting. N attends meeting in administrative department. R does not attend meeting in security department.

1. Who among the following person attend meeting on Friday?
(a) O (b) M (c) P
(d) N (e) R

2. Which of the following combinations of "Person – Day" is true with respect to the given arrangement?
(a) R – Friday (b) M-Saturday
(c) Q– Thursday (d) P – Friday
(e) P – Tuesday

3. L attends meeting in which of the following department?
(a) Security (b) HR
(c) Administrative (d) Finance
(e) Either (a) or (b)

4. In this arrangement, Q is related to Monday, L is related to Security then N is related to?
(a) Thursday
(b) Wednesday
(c) None of the given options is true.
(d) HR
(e)Sunday

5. How many persons attend meeting between P and O?
(a) 3 (b) 4 (c) 2
(d) 1 (e) None of these

Directions (6-10): In these questions, a relationship between different elements is shown in the statements. The statements are followed by two conclusions. Give answer
(a) If only conclusion I is true.
(b) If only conclusion II is true.
(c) If either conclusion I or II is true.
(d) If neither conclusion I nor II is true.
(e) If both conclusions I and II are true.

(6-7): Statements: L>I=N>P; I≥R>K; N≤E<Z

6. Conclusions: I. E>P II.R<L

7. Conclusions: I. K>N II.I<Z

(8-9): Statements: S>A=N≥D; A≥L>E; M≤L≤D

8. Conclusions: I. S>E II.L<S

9. Conclusions: I. A>M II. A=M

10. Statements: P≥V≥R≤E<Y; G≥E>N
Conclusions: I. P>N II.G≥Y

Directions (11-15): Study the following information and answer the given questions:

A, B, C, D, E, F, G & H are eight friends and sitting around a circular table but not necessarily in same order. Some of them are facing inside and some of them are facing outside. A sits third to right of H. There is two people sits between H and B. C sits second to left of B. There is three people sits between B and E. D is second to left of F, who is not immediate neighbor of A. Immediate neighbours of H faces same direction as H. F sits third to left of A, who faces centre. The immediate neighbors of A face opposite to the direction of A.

11. Who is sitting third to right of F?
(a) C (b) B (c) A
(d) E (e) D

12. Who is facing inside?
(a) AD (b) AGH (c) AB
(d) ADC (e) None of these

13. Who sits opposite to H?
(a) A (b) D (c) F
(d) E (e) G

14. How many people are siting between C and B, when counted from left of C?
(a) Two (b) Three (c) One
(d) Four (e) Five

15. Which of the following pair of persons is sitting exactly between D and C when counted from right of D?
(a) HE (b) CE (c) FH
(d) BF (e) DF

Directions (16-20): Study the following information carefully and answer the questions:

Ten persons are sitting in 2 parallel rows containing 5 persons in each row. In 1st row M, N, O, P and Q are seated and are facing south. In 2nd row, U, V, X, Y and Z are seated and are facing north. Therefore in the given seating arrangement, each member seated in a row faces another member of the other row. They like different colours Red, Orange, Blue, Brown, Black, White, Yellow, Pink, Peach, and Grey (not necessarily in same order).

M doesn't like brown and P likes black. Y sits third to the left of U, who likes yellow. M faces immediate neighbour of Y, who likes orange. The one who likes peach sits at extreme end. O sits second to the right of M. The one who likes red faces the one who likes pink but M doesn't like pink. Only one person sits between N and P. V and Z are immediate neighbours. Z does not face M and N, who doesn't like grey. The one who faces U likes white. The one who faces an immediate neighbour of Y likes brown.

16. How many persons are seated between N and the one who likes white?
(a) None (b) One (c) Two
(d) Three (e) None of these

17. Who amongst the following faces P?
(a) U
(b) The one who likes pink
(c) X
(d) N
(e) The one who likes grey

18. Which of the following is true regarding M?
(a) N and X are immediate neighbours of M
(b) M sits at one of the extreme ends of the line.
(c) M likes black.
(d) P sits immediate left of M
(e) None of these

19. Who amongst the following pair sits exactly in the middle of the rows?
(a) M, Z (b) P, Y
(c) None of these (d) U, N
(e) M, V

20. V likes which of the following colour?
(a) Brown (b) Pink (c) Black
(d) White (e) None of these

Direction (21-25): In each of the questions below are given four statements followed by two conclusions numbered I & II. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.
(a) If only conclusion I is true
(b) If only conclusion II is true
(c) If either conclusion I or II is true
(d) If neither conclusion I nor II is true
(e) If both conclusion I and II are true

(21-22):
Statements: All remarks are feedbacks.
Some feedbacks are words.
No word is a digit.

21. Conclusions: I. Some feedbacks are definitely not digits.
II. All digits being feedbacks is a possibility.

22. Conclusions: I. All remarks being words is a possibility.
II. At least some remarks are digits.

23. Statements: Some files are boxes.
All boxes are cartons.
No carton is a plastic.
Conclusions: I. No file is a plastic.
II. Some files are plastics.

24. Statements: Some desks are chairs.
Some chairs are seats.
No seat is a table.
Conclusions: I. All desks can never be tables.
II. Some chairs are definitely not tables.

25. Statements: All routes are ways.
All ways are paths.
Some ways are bridges.
Conclusions: I. At least some bridges are routes.
II. All routes being bridges is a possibility.

26. How Many such pairs of letters are there in the word 'TRANSFER', each of which has as many letters between them in the word as they have between them in the English alphabet?
(a) None (b) One (c) Three
(d) More than three (e) Two

27. What should come in place of question mark (?) in the following series based on the above arrangement?
BED EIG HMJ KQM ?
(a) PUN (b) OUQ (c) NUQ
(d) NUP (e) NUR

Directions (28-29): Read the following information carefully to answer the given questions.
R is the sister of Q. M is the father of R. V is the son of Q. C is the maternal grandfather of V. M does not have married daughter.

28. How is R related to V?
(a) Uncle (b) Aunt (c) Mother
(d) Can't be determined (e) Nephew

29. If B is married to Q, then how is B related to M?
(a) Grandson (b) Son-in-law
(c) Son (d) Daughter-in-law
(e) Can't be determined

Directions (30-32): Read the following information carefully to answer the given questions.

A certain number of persons are seated in a row. The Row is arranged in a vertical manner and all are facing to north direction. Ranjan sits fourth from the left end of the row. There are two person sit between Ranjan and Seema. Puja sits immediate right of Seema. There are as many person sit between Puja and Seema as sit between Dinesh and Pooja. Dinesh does not sit to the left of Ranjan.

30. How many person sits between Ranjan and Dinesh?
(a) 3 (b) None (c) 5
(d) 4 (e) 1

31. What is the position of Puja with respect to Ranjan?
(a) Immediate right
(b) Third to the left
(c) None of these
(d) Second to the left
(e) Fourth to the right

32. How many persons sit in the row?
(a) 4 (b) 6 (c) 7
(d) 11 (e) 9

Directions (33-35): Read the following information carefully to answer the given questions.

There are six persons S, T, U, V, W and X, who got different marks in the examination. S got more marks than only U and X. T got less marks than W, who did not get the highest marks in the examination. The Second highest person got 92 marks.

33. How many persons got more marks than U?
(a) Four (b) Two (c) Five
(d) Can't be determined (e) One

34. If S got 69 marks and U got 68 marks, then which of the following statement is true?
(a) X got the lower marks.
(b) U got the fifth highest marks.
(c) Five persons got more marks than X
(d) All are true
(e) X got 66 marks is a possibility.

35. V got which of the following possible score?
(a) 85 (b) 66 (c) 92
(d) 89 (e) 94

QUANTITATIVE APTITUDE

Directions (36-41): Given below, the table which shows the total students in 4 different class of a school and percentage of students participating in Dance and play from these 4 classes.

Classes	Total Students	% of students participating	
		Dance	Play
VI	500	15	8
VII	400	10	6
VIII	360	25	10
IX	250	10	12

36. What is the ratio between students participating in Dance from Class VII and IX together to the students participating in Play from class VI and VIII together
(a) 43 : 53 (b) 65 : 76 (c) 44 : 57
(d) 63 : 71 (e) 62 : 77

37. What is the average of students who participating in Play from all class.
(a) $32\frac{1}{2}$ (b) $34\frac{1}{2}$ (c) $27\frac{1}{2}$
(d) $35\frac{1}{2}$ (e) $30\frac{1}{2}$

38. Students who are participating in dance from class VII are what percent more or less than students who are participating is play from class IX.
(a) $12\frac{2}{7}\%$ (b) $14\frac{2}{7}\%$ (c) $33\frac{1}{3}\%$
(d) $16\frac{2}{3}\%$ (e) $66\frac{2}{3}\%$

39. What is the sum of students who does not participate in dance and play from class VI and IX together.
(a) 720 (b) 480 (c) 620
(d) 580 (e) 560

40. If 20% of students who participate in dance from class VI also participate in play then find the ratio of students from class VI who participated only in Dance to students participated only in play.
(a) 12 : 5 (b) 16 : 25 (c) 19 : 20
(d) 20 : 19 (e) 15 : 11

41. Students participating in Dance from class VII is what percent of students participating in play from class IX.
(a) $33\frac{1}{3}\%$ (b) $120\frac{2}{7}\%$ (c) $114\frac{2}{7}\%$
(d) $133\frac{1}{3}\%$ (e) $116\frac{2}{3}\%$

Directions (42-46): What should come in place of question mark (?) in the following number series?

42. 3, 5, 15, 45, 113, ?
(a) 190 (b) 234 (c) 293
(d) 243 (e) 208

43. 17, 98, 26, 89, 35, ?
(a) 78 (b) 79 (c) 80
(d) 81 (e) 82

44. 3240, 540, 108, 27, ?, 4.5
(a) 12 (b) 7 (c) 9
(d) 8 (e) 6

45. 7, 4.5, 5.5, 12, 49, ?
(a) 393 (b) 378 (c) 197
(d) 148 (e) 246

46. 2, 17, 89, 359, 1079, ?
(a) 2134 (b) 1081 (c) 2195
(d) 2159 (e) 1945

In some shifts 5 inquality asked in place of series.

Directions (42-46): In the following questions two equations numbered (I) and (II) are given. You have to solve both equations and determined the relationship between;
(a) if $x > y$
(b) if $x \geq y$
(c) if $x < y$
(d) if $x \leq y$
(e) If $x = y$ or the relationship cannot be established

42. (i) $x^2 - 5x + 6 = 0$
(ii) $3y^2 + 3y - 18 = 0$

43. (i) $x^2 - 11x + 30 = 0$
(ii) $y^2 + y - 20 = 0$

44. (i) $2x^2 + 2x - 4 = 0$
(ii) $y^2 - 5y + 4 = 0$

45. (i) $x^2 + 6x - 16 = 0$
(ii) $y^2 - 6y + 5 = 0$

46. (i) $x^2 - 4 = 0$
(ii) $y^2 - 9y + 20 = 0$

Directions (47-52): Find out of the approximate value of ? in the following questions

47. $\left(\sqrt{80.997} - \sqrt{25.001}\right) \times \left(\sqrt{120.90} + \sqrt{16.02}\right) = ?$
(a) 50 (b) 60 (c) 75
(d) 70 (e) 55

48. $55.01 - 345.02 \div 22.99 = 2 \times ?$
(a) 20 (b) 25 (c) 22
(d) 15 (e) 18

49. $\sqrt{3099.985 \div 62.001 + 14.001} = ?$
(a) 4 (b) 8 (c) 6
(d) 9 (e) 5

50. $(111.99 \times 5) \div 14.02 = 11.002 + ?$
(a) 34 (b) 19 (c) 39
(d) 29 (e) 38

51. 24.97% of $84.01 \div 6.995 = ?$
(a) 3 (b) 8 (c) 5
(d) 7 (e) 6

52. $\left(184.002 - \frac{29}{5}\right) \times 29.99 = ?$
(a) 4950 (b) 4820 (c) 5550
(d) 5346 (e) 5260

53. Sum of present age of A, B, C and D is 76 years. After 7 years ratio of their ages is 7 : 6 : 5 : 8. What is C's present age.
(a) 14 (b) 12 (c) 13
(d) 8 (e) 10

54. Sum of length of two trains A and B is 660. Ratio of speed of A and B is 5 : 8. Ratio between time to cross and electric pole by A and B is 4 : 3. Find the difference in the length of two trains.
(a) 50 (b) 60 (c) 80
(d) 75 (e) 90

55. A mixture of milk and water in a jar contains 28 L milk and 8 L water. X L milk and X L water is mixed in the mixture. If 40% of the new mixture is 20 L, then find the value of X.
(a) 7 L (b) 8 L (c) 6 L
(d) 5 L (e) 9 L

56. A alone can do a work in 24 days. Time taken by A in completing 1/3 of work is equal to the time taken by B in completing 1/2 of the work. In what time A and B together will complete the work.
(a) 9 days (b) 10 days (c) 12 days
(d) $9\frac{3}{5}$ days (e) 8 days

57. Marked priced of A is 1600 Rs more than its cost price. When discount on A is 500 there is a profit of 25% obtained. At what price A should be sold to obtain 30% profit.
(a) 4800 (b) 5600 (c) 5400
(d) 5200 (e) 5720

58. The ratio of diameter and height of a right circular cylinder is 4 : 3. If diameter of the cylinder get reduced by 25% then its total surface area reduced to 318.5π square meter. What is the circumference of the base of the cylinder.
(a) $28\ \pi\ cm^2$ (b) $14\ \pi\ cm^2$ (c) $35\ \pi\ cm^2$
(d) $7\ \pi\ cm^2$ (e) $49\ \pi\ cm^2$

59. A three digits number X, which tenth's place digit is 3. If the unit digit and hundred place digit of number x interchanged thus the number formed is 396 more than the previous one. If the sum of unit digit and hundred digit is 14, then what is the number?
(a) 480 (b) 539 (c) 593
(d) 935 (e) None of these

60. S_1 is a series of 4 consecutive even numbers. If the sum of reciprocal of first two numbers of S_1 is 11/60, then what is the reciprocal of third highest number of S_1
(a) $\frac{2}{13}$ (b) $\frac{1}{12}$ (c) $\frac{2}{17}$
(d) $\frac{1}{13}$ (e) None of these

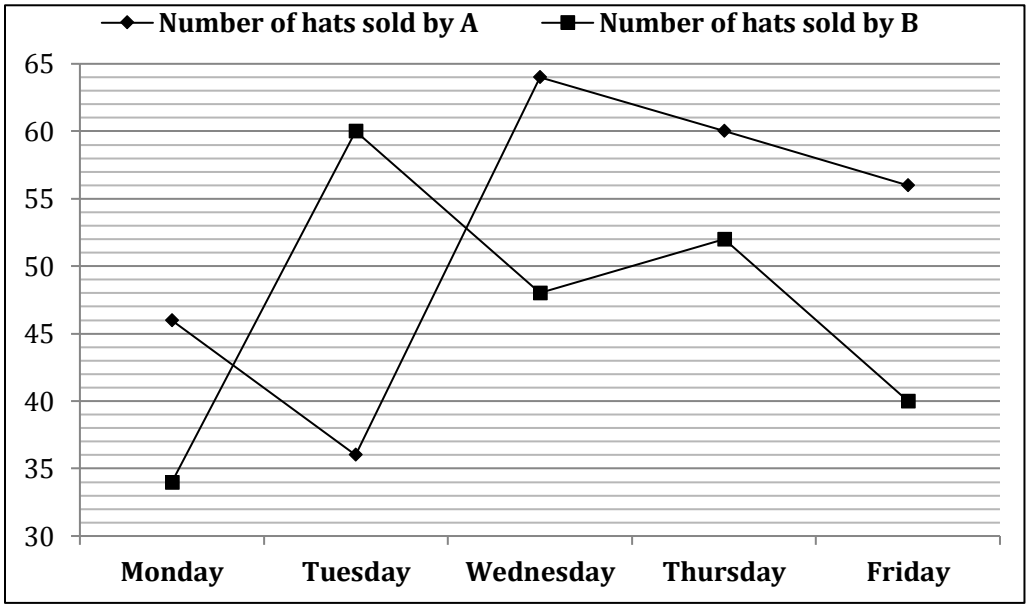
61. A, B and C invested in a business in the ratio 6 : 8 . B invested for a period whose numerical value is 112.5% of his investement and A and C invested for one year. If profit of B at the end of year is 16750, then what is the share of profit of C.
(a) 20225 (b) 22125 (c) 25225
(d) 25125 (e) 23125

62. A boat covers 18 km downstream in 3 hours. If speed of current is $33\frac{1}{3}\%$ of its downstream speed, then in what time it will cover a distance of 100 km upstream.
(a) 50 hour (b) 40 hour (c) 30 hour
(d) 60 hour (e) 25 hour

63. Ratio of cost price to selling price of an article is 5 : 6. If 20% discount is offered on marked price of article then marked price is what percent more than cost price?
(a) $\frac{100}{3}\%$ (b) 50% (c) 40%
(d) $\frac{200}{3}\%$ (e) 60%

64. Ramesh has 20% savings with him from his monthly salary. If expenditure on clothing is 25% of overall expenditure and his total expenditure except clothing is 3600 then find his saving.
(a) 1000 (b) 1500 (c) 1600
(d) 1200 (e) 900

Direction (65-70): A bar graph is given below which shows hat sold by seller A and seller B on five days.



65. Total number of hats sold by A and B together on Wednesday is how much percentage more than the number of hats sold by A and B together on Tuesday:
(a) $15\frac{2}{3}\%$ (b) $8\frac{1}{3}\%$ (c) $16\frac{2}{5}\%$
(d) $16\frac{2}{3}\%$ (e) $21\frac{3}{7}\%$

66. If number of hats sold on Friday by A is increases by $14\frac{2}{7}\%$, then what will be the average no. of hats sold on Monday, Wednesday and Friday by A?
(a) 85 (b) 58 (c) 56
(d) 82 (e) 52

67. Find the number of hats sold on Saturday by A and B together, if number of hats sold on Saturday is $7\frac{1}{7}\%$ more than the hats sold on Thursday by A and B together?
(a) 110 (b) 114 (c) 116
(d) 118 (e) 120

68. What is the difference between the number of hats sold on Monday and Wednesday by B to the number of hats sold on Friday by both A & B together.
(a) 9 (b) 12 (c) 14
(d) 21 (e) 24

69. A sold 80% defective hats on Thursday and B sold 75% defective hats on same day. Then find the number of hats sold by A and B on Thursday that are not defected?
(a) 25 (b) 20 (c) 18
(d) 32 (e) 40

70. Find the ratio of number between hats sold by A on Tuesday & Friday together to number of hats sold by B on same days.
(a) 25 : 23 (b) 23 : 25 (c) 21 : 25
(d) 25 : 21 (e) 18 : 17

ENGLISH LANGUAGE

Directions (71-80): Read the following passage carefully and answer the questions given below it. Certain words/phrases have been printed in bold to help out locate them while answering some of the questions.

How many really suffer as a result of labor market problems? This is one of the most critical yet **contentious** social policy questions. In many ways, our social statistics exaggerate the degree of hardship. Unemployment does not have the same **dire** consequences today as it did in the 1930's when most of the unemployed were primary breadwinners, when income and earnings were usually much closer to the margin of subsistence, and when there were no countervailing social programs for those failing in the labor market. Increasing affluence, the rise of families with more than one wage earner, the growing predominance of secondary earners among the unemployed, and improved social welfare protection have unquestionably **mitigated** the consequences of joblessness. Earnings and income data also overstate the dimensions of hardship. Among the millions with hourly earnings at or below the minimum wage level, the overwhelming majority are from multiple-earner, relatively affluent families. Most of those counted by the poverty statistics are elderly or handicapped or have family responsibilities which keep them out of the labor force, so the poverty statistics are by no means an accurate indicator of labor market pathologies.

Yet there are also many ways our social statistics underestimate the degree of labor-market-related hardship. The unemployment counts exclude the millions of fully employed workers whose wages are so low that their families remain in poverty. Low wages and repeated or prolonged unemployment frequently interact to undermine the capacity for self-support. Since the number experiencing joblessness at some time during the year is several times the number unemployed in any month, those who suffer as a result of forced idleness can equal or exceed average annual unemployment, even though only a minority of the jobless in any month really suffer. For every person counted in the monthly unemployment tallies, there is another working part-time because of the **inability** to find full-time work, or else outside the labor force but wanting a job. Finally, income transfers in our country have always focused on the elderly, disabled, and dependent, neglecting the needs of the working poor, so that the dramatic expansion of cash and in-kind transfers does not necessarily mean that those failing in the labor market are adequately protected.

As a result of such contradictory evidence, it is uncertain whether those suffering seriously as a result of labor market problems number in the hundreds of thousands or the tens of millions, and, hence, whether high levels of joblessness can be tolerated or must be countered by job creation and economic stimulus. There is only one area of agreement in this debate—that the existing poverty, employment, and earnings statistics are inadequate for one their primary applications, measuring the consequences of labor market problems.

71. The author contrasts the 1930's with the present in order to show that
- (a) more people were unemployed in the 1930's
- (b) unemployment now has less severe effects
- (c) social programs are more needed now
- (d) there now is a greater proportion of elderly and handicapped people among those in poverty
- (e) poverty has increased since the 1930's

72. Which of the following proposals best responds to the issues raised by the author?
- (a) Innovative programs using multiple approaches should be set up to reduce the level of unemployment.
- (b) A compromise should be found between the positions of those who view joblessness as an evil greater than economic control and those who hold the opposite view.
- (c) New statistical indices should be developed to measure the degree to which unemployment and inadequately paid employment cause suffering.
- (d) Consideration showed be given to the ways in which statistics can act as partial causes of the phenomena that they purport to measure.
- (e) The labor force should be restructured so that it corresponds to the range of job vacancies.

73. The author's purpose in citing those who are repeatedly unemployed during a twelve-month period is most probably to show that
(a) there are several factors that cause the payment of low wages to some members of the labor force
(b) unemployment statistics can underestimate the hardship resulting from joblessness
(c) recurrent inadequacies in the labor market can exist and can cause hardships for individual workers.
(d) a majority of those who are jobless at any one time do not suffer severe hardship
(e) there are fewer individuals who are without jobs at some time during a year than would be expected on the basis of monthly unemployment figures

74. According to the passage, one factor that causes unemployment and earnings figures to overpredict the amount of economic hardship is the
(a) recurrence of periods of unemployment for a group of low-wage workers
(b) possibility that earnings may be received from more than one job per workers.
(c) Fact that unemployment counts do not include those who work for low wages and remain poor
(d) Establishment of system of record-keeping that makes it possible to compile poverty statistics
(e) Prevalence, among low-wage workers and the unemployed, of members of families in which other are employed

75. The author uses 'labour market problems' in passage to refer to which of the following?
(a) The overall causes of poverty
(b) Deficiencies in the training of the work force
(c) Trade relationships among producers of goods
(d) Shortage of jobs providing adequate income
(e) Strikes and inadequate supplies of labour

76. Which of the following is the principle topic of the passage?
(a) What causes labour market pathologies that result in suffering
(b) Why income measures are imprecise in measuring degrees of poverty
(c) Which of the currently used statistical procedures are the best for estimating the incidence of hardship that is due to unemployment
(d) Where the areas of agreement are among poverty, employment and earnings figures
(e) How social statistics give an unclear picture of the degree of hardship caused by low wages and insufficient employment opportunities

Directions (77-80): Choose the word/group of words which is most **similar** in meaning to the word/group of words printed in bold as used in the passage.

77. Dire
(a) compel (b) terrible (c) clamant
(d) exigent (e) afflictive

78. Mitigate
(a) alleviate (b) surfeit (c) glut
(d) satisfy (e) incite

Directions (79-80): Choose the word/group of words which is **most opposite** in meaning to the word/group of words printed in bold as used in passage.

79. Inability
(a) malaise (b) frailty (c) competence
(d) sycophancy (e) failure

80. Contentious
(a) agreeable (b) intrusive (c) combative
(d) factious (e) fierce

Directions (81-90): In each of the questions given below a sentence is given which is divided into 5 parts. The first part which is numbered (1) and is grammatically correct. You have to find the error in the other numbered part of the sentence and if you find the error in any part of the sentence apart from (1) then that part of the sentence is the correct choice for the given question. If all the parts are grammatically correct choose option (e) as your choice.

81. (1) **If Rajeshwari** /(A) would have come (B)/ to me I would have/(C) given her the/(D) help she needed./ (E) No error.
(a) A (b) B (c) C
(d) D (e) No error

82. (1) **I bade him** /(A) to submit all (B)/ the important documents/ (C) before he left /(D) for the meeting./(E) No error.
(a) A (b) B (c) C
(d) D (e) No error

83. (1) **When we** /(A)reached the station /(B) we found /(C) that there was /(D) no place to stand./ (E) No error.
(a) A (b) B (c) C
(d) D (e) No error

84. (1) **All the pupils** /(A) stood up respectively/(B) as soon as /(C) the guru /(D) entered the room/ (E) No error.
(a) A (b) B (c) C
(d) D (e) No error

85. (1) **When the father** /(A) in him/ (B) took charge of the/(C) situation, all the children /(D) shook in their shoes./(E) No error
(a) A (b) B (c) C
(d) D (e) No error

86. (1)**I had just** /(A)reached a hotel which/(B) was inaugurated by the Prime Minister /(C) when my mother called me to bring some mangoes/(D) while coming back home./ (E) No error
(a) A (b) B (c) C
(d) D (e) No error

87. (1) **If people get** /(A)recurring opportunities for /(b)independent thinking they /(C)would better /(D) prepare for it. /(E)No Error
(a) A (b) B (c) C
(d) D (e) No error

88. (1) **When I first visited Mexicali,** /(A)I had heard/(B) rumors about "La Chinesca," a network of basement tunnels/(C) where the city's Chinese immigrants had/(D) created their own underground Chinatown./(E) No error.
(a) A (b) B (c) C
(d) D (e) No error

89. (1) **The deepest ocean blue**/ (A) rolls with earth green, /(B) each hue primordial /(C) in the force they /(D) exerts on the other./(E) No error.
(a) A (b) B (c) C
(d) D (e) No error

90. (1) **The school district's policy change** /(A) comes at a time when the state isn't really sure/ (B) how it can enforce the /(C)bathroom law, which requires people to use the bathroom /(D) according to the gender of their birth certificate./ (e) No error
(a) A (b) B (c) C
(d) D (e) No error

Direction (91-100): Which of the following phrases (I), (II), and (III) given below each sentence will fit into the blank to make the sentence grammatically correct? Choose the best option among the five given alternatives that reflect the correct use of phrase in the context of the grammatically correct sentence.

91. We should realize that the chance of accident _____in a train or on the road.
(I) may be at least as great in our home as
(II) was at least as great as in homes
(III) may be as great or greater in our homes than
(a) Only (I) is correct
(b) Only (III) is correct
(c) Both (I) and (II) are correct
(d) Both (I) and (III) are correct
(e) None is correct

92. Primitive man _____an imbalance which could be rectified only by punishing the wrongdoer.
(I) believes that a crime created
(II) believed that a crime created
(III) believed that a criminal created
(a) Only (I) is correct
(b) Only (II) is correct
(c) Only (III) is correct
(d) Both (I) and (II) are correct
(e) All are correct

93. Calamities and indigence in the past _____ than at present.
(I) was afflicted more
(II) were more afflict
(III) may afflict more
(a) Only (I) is correct
(b) Only (II) is correct
(c) Both (I) and (III) are correct
(d) Both (II) and (III) are correct
(e) None is correct

94. _____ to keep his promise, he will earn the distrust of all the voters.

(I) If the candidate has failed

(II) Since the candidate has failed

(III) If the candidate fails

(a)Only (I) is correct

(b)Only (II) is correct

(c)Both (II) and (III) are correct

(d)Both (I) and (II) are correct

(e)All are correct

95. It is difficult to prevent assault against environment as _____ animals.

(I) those against

(II) it is against

(III) preventing those against

(a) Only (I) is correct

(b) Only (II) is correct

(c) Only (III) is correct

(d) Both (I) and (II) are correct

(e) All are correct

96. Top managers are often stymied by the _____ conflict.

(I) difficulties of managing

(II) difficulty for managing

(III) management of difficult

(a) Only (I) is correct

(b) Only (II) is correct

(c) Both (I) and (III) are correct

(d) Both (II) and (III) are correct

(e) None is correct

97. Reaching collective decisions _____ individual preferences is an imperfect science.

(I) belonging to

(II) based on

(III) concerning

(a) Only (I) is correct

(b) Only (II) is correct

(c) Both (I) and (III) are correct

(d) Both (II) and (III) are correct

(e) All are correct

98. _____, I could not accept his statement that supernatural beings had caused the disturbance.

(I) A realist that I am

(II) Being a realist

(III) Being that I am a realist

(a) Only (II) is correct

(b) Only (III) is correct

(c) Both (I) and (II) are correct

(d) Both (II) and (III) are correct

(e) All are correct

99. Taking good decisions and _____ are the hallmarks of high performing companies.

(I) implement those quickly

(II) implementing those quickly

(III) quick implementing those

(a) Only (I) is correct

(b) Only (II) is correct

(c) Only (III) is correct

(d) Both (I) and (II) are correct

(e) None is correct

100. Innovation _____ the top corporate agenda.

(I) has always been

(II) is

(III) have been

(a) Only (I) is correct

(b) Only (II) is correct

(c) Both (II) and (III) are correct

(d) Both (I) and (II) are correct

(e) All are correct

Solutions

REASONING ABILITY

Directions (1-5):

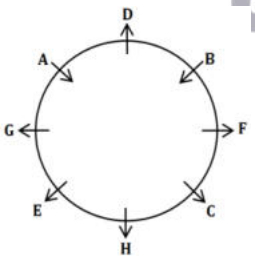
Day	Employees	Department
Monday	M	HR
Tuesday	P	Security
Wednesday	Q	Administrative
Thursday	L	Security
Friday	N	Administrative
Saturday	R	HR
Sunday	O	Finance

1. (d); 2. (e); 3. (a);
4. (b); 5. (b);

Directions (6-10):

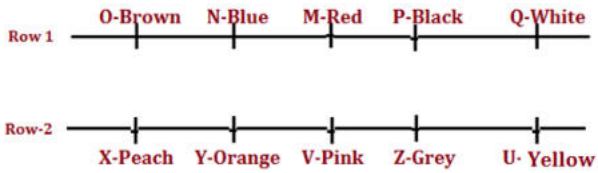
6. (e); I. E > P (True) II. R < L (True)
7. (b); I. K > N (false) II. I < Z (True)
8. (e); I. S > E (True) II. L < S (True)
9. (c); I. A > M (false) II. A = M (false)
10. (d); I. P > N (false) II. G ≥ Y (false)

Directions (11-15):



11. (d); 12. (c); 13. (b);
14. (c); 15. (d);

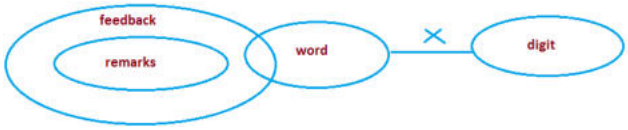
Directions (16-20):



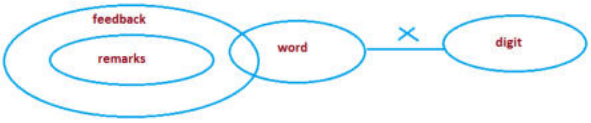
16. (c); 17. (e); 18. (d);
19. (e); 20. (b);

Directions (21-25):

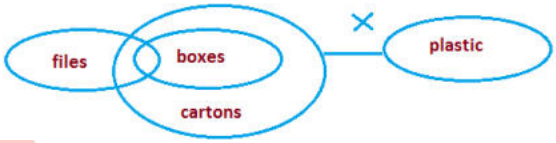
21. (e);



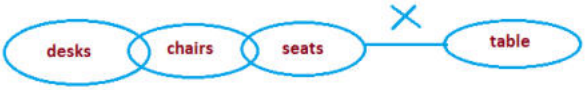
22. (a);



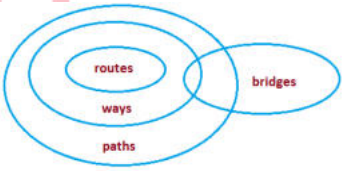
23. (c);



24. (b);

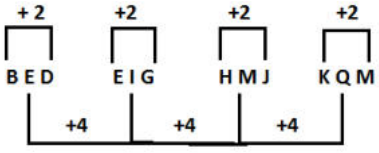


25. (b);



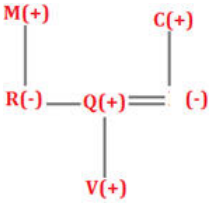
26. (c); 'AE, EF, NR'

27. (d); 'NUP'

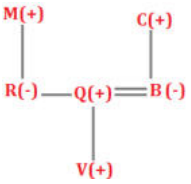


Directions (28-29):

28. (b);



29. (d);



Directions (30-32):

30. (d); **31. (e);** **32. (e);**

Directions (33-35):

33. (d);

V > W > T > S > U/X > X/U
92

34. (d);

V > W > T > S > U > X
92 69 68

35. (e);

V > W > T > S > U/X > X/U
92

QUANTITATIVE APTITUDE

36. (b); Required ratio

$$= \frac{\frac{10}{100}\times 400+\frac{10}{100}\times 250}{\frac{8}{100}\times 500+\frac{10}{10}\times 360} = 65:76$$

37. (a); Required average

$$\frac{\frac{8}{100}\times 500+\frac{6}{100}\times 400+\frac{10}{100}\times 360+\frac{12}{100}\times 250}{4}$$

$$= \frac{130}{4} = \frac{65}{2} = 32\frac{1}{2}$$

38. (c); Students participating in dance from Class VII

$$= \frac{10}{100}\times 400 = 40$$

Students participating in play from class IX

$$= \frac{12}{100}\times 250 = 30$$

Required percentage

$$= \frac{10}{30}\times 100 = \frac{100}{3}\% = 33\frac{1}{3}\%$$

39. (d); Students who don't participate in dance and play from class VI

$$= 500 - (15\% + 8\%) of\ 500$$

$$= 500 - \frac{23}{100}\times 500$$

$$= 500 - 115 = 385$$

Students who do not participate in dance and play from class IX

$$= 250 - (10\% + 12\%) \times 250$$

$$= 250 - 55 = 195$$

Required sum = 195 + 385 = 580

40. (a); Students who participate only in dance from class VI

$$= \frac{15}{100}\times 500 - \frac{20}{100}\times\frac{15}{100}\times 500$$

$$= 75 - \frac{1}{5}\times 75 = 60$$

Students who participate only in play from class VI

$$= \frac{8}{100}\times 500 - 15 = 40 - 15 = 25$$

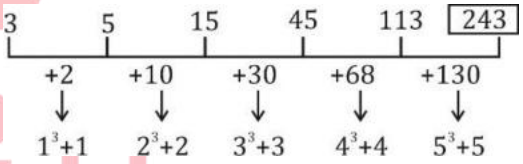
Required ratio = 60 : 25 = 12 : 5

41. (d); Required ratio

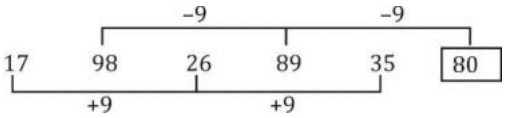
$$= \frac{\frac{10}{100}\times 400}{\frac{12}{100}\times 250}\times 100$$

$$= \frac{10\times 400}{12\times 250}\times 100 = 133\frac{1}{3}\%$$

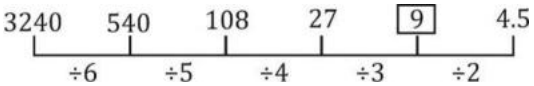
42. (d);



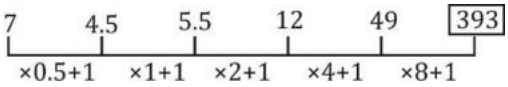
43. (c);



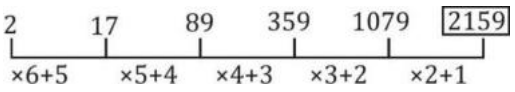
44. (c);



45. (a);



46. (d);



42. (b); (i) $x^2 - 3x - 2x + 6 = 0$

$x(x-3) - 2(x-3) = 0$

$(x-2)(x-3) = 0$

$x = 2, 3$

(ii) $3y^2 + 3y - 18 = 0$
$3y^2 + 9y - 6y - 18 = 0$
$3y(y + 3) - 6(y + 3) = 0$
$y = -3, 2$
$x \geq y$

43. (a); (i) $x^2 - 11x + 30 = 0$
$x^2 - 6x - 5x + 30 = 0$
$x(x - 6) - 5(x - 6) = 0$
$(x - 6)(x - 5) = 0$
$x = 6, 5$
(ii) $y^2 + y - 20 = 0$
$y^2 + 5y - 4y - 20 = 0$
$y(y + 5) - 4(y + 5) = 0$
$(y - 4)(y + 5) = 0$
$y = +4, -5 \;\; ; x > y$

44. (d); (i) $2x^2 + 2x - 4 = 0$
$2x^2 + 4x - 2x - 4 = 0$
$2x(x + 2) - 2(x + 2) = 0$
$x = -2, 1$
(ii) $y^2 - 5y + 4 = 0$
$y^2 - 4y - y + 4 = 0$
$y(y - 4) - 1(y - 4) = 0$
$y = 4, 1$
$x \leq y$

45. (e); (i) $x^2 + 6x - 16 = 0$
$x^2 + 8x - 2x - 16 = 0$
$x(x + 8) - 2(x + 8) = 0$
$(x - 2)(x + 8) = 0$
$x = 2, -8$
(ii) $y^2 - 6y + 5 = 0$
$y^2 - 5y - y + 5 = 0$
$y(y - 5) - 1(y - 5) = 0$
$y = 5, 1$
No relation can be established

46. (c); (i) $x^2 - 4 = 0$
$(x + 2)(x - 2) = 0$
$x = +2, -2$
(ii) $y^2 - 9y + 20 = 0$
$y^2 - 5y - 4y + 20 = 0$
$y(y - 5) - 4(y - 5) = 0$
$(y - 4)(y - 5) = 0$
$y = 4, 5$
$y > x$

47. (b); $\approx (9 - 5) \times (11 + 4) = ?$
$\approx ? = 60$

48. (a); $\approx 55 - \frac{345}{23} = 2 \times ? \;\; \approx ? = 20$

49. (b); $\approx \sqrt{\frac{3100}{62} + 14}$
$\approx \sqrt{50 + 14} \;\; \approx 8$

50. (d); $\approx (112 \times 5) \div 14 = 11 + ?$
$\approx 40 - 11 = ?$
$\approx ? = 29$

51. (a); $\approx \frac{25}{100} \times \frac{84}{7} = ?$
$\approx ? = 3$

52. (d); $\approx \left(184 - \frac{29}{5}\right) \times 30 = ?$
$\approx \left(\frac{184 \times 5 - 29}{5}\right) \times 30 = ?$
$\approx \frac{891}{5} \times 30$
$\approx ? = 5346$
≈ 5340

53. (c); At present sum of age = 76
After 7 years sum of age will be
$7x + 6x + 5x + 8x = 76 + 7 \times 4$
$26x = 76 + 28$
$x = \frac{104}{26}$
$x = 4$
C's present age = 5x – 7
= 20 – 7 = 13

54. (b); Sum of length of train = 660
$l_1 + l_2 = 660$
$S_A : S_B = 5 : 8$
Let speed be 5x and 8x
And time taken to cross pole be 4y, 3y
So,
$5x \times 4y + 8x \times 3y = 660$
$44xy = 660 \Rightarrow xy = 15$
$l_1 - l_2 = 24xy - 20xy$
$= 4xy \Rightarrow 60$

55. (a); 40% of new mixture = 20L
100% of new mixture = $\frac{20}{40} \times 100 = 50$ L
$28 + x + 8 + x = 50$
$2x = 50 - 36$
$x = 7$L

56. (d); Time taken by A in completing 1/3 of work
$= 24 \times \frac{1}{3} = 8\ days$
8 day = time taken by B in completing 1/2 of work
B alone will complete the work = 16 days
Required time
$= \frac{16 \times 24}{(24 + 16)} = 9\frac{3}{5}$ days

57. (e); MP = 1600 + CP ....(i)
$MP - 500 = \frac{125}{100} \times CP$
$MP = \frac{5}{4} CP + 500$
4MP = 5CP + 2000 ...(ii)
Solving (i) and (ii)
CP = 4400
Required selling price = $\frac{130}{100} \times 4400 = 5720$

58. (a); Let d=4x and h = 3x
Total surface area of right circular cylinder is 2πr (r +h)
$\begin{bmatrix} Where\ r \rightarrow radius \\ h \rightarrow height \end{bmatrix}$
$\therefore 2\pi \left[2x(2x+3x) - \frac{3x}{2}\left(\frac{3x}{2}+3x\right)\right] = 318.5\pi$
$2\left[10x^2 - 6.75x^2\right] = 318.5$
$6.5x^2 = 318.5$
$x^2 = 49 \Rightarrow x = \pm 7$
∴ radius (r) = 14
height (h) = 21
∴ Circumference of base of cylinder
$= 2\pi r = 28\pi\ cm^2$

59. (b); Let numbere x be = abc
So,
According to question
b = 3
(100c – 10b – a) – (100a – 10b – c) =396
$99c - 99a = 396$
$c - a = 4$ ...(i)
And it is given that
c + a = 14 ...(ii)
Solving (i) & (ii)
c = 9
a = 5
so, number is = 539

60. (b); Let 4 consecutive even number is
x, x+ 2, x+ 4, x+ 6
$\frac{1}{x} + \frac{1}{x+2} = \frac{11}{60}$
$\frac{x+2+x}{x(x+2)} = \frac{11}{60}$
$\frac{2(x+1)}{x^2+2x} = \frac{11}{60}$
$120x + 120 = 11x^2 + 22x$
$11x^2 - 98x - 120 = 0$
$x = \frac{-24}{22}, 10 = -\frac{12}{11}, 10$
∴ third highest number is 12 and reciprocal 3rd highest no. is $\frac{1}{12}$.

61. (d); Profit will be shared in ratio
$= 12 \times 6 : 8 \times \left(\frac{9}{8} \times 8\right) : 9 \times 12$
$= 12 \times 6 : 8 \times 9 : 9 \times 12 = 2 : 2 : 3$
$C's\ profit = \frac{16750}{2} \times 3 = 25125$

62. (a); $Downstream\ speed = \frac{18}{3} = 6\ km/hr$
or $x + y = 6$ (when $x \rightarrow$ speed of boat in Still water, $y \rightarrow$ speed of current)
$speed\ of\ current = \frac{1}{3} \times 6 = 2\ km/hr$
Speed of boat in still water = 4 km/hr
$Required\ time = \frac{100}{(4-2)} = 50\ hour$

63. (b); Let M.P. = x
And cost price and selling price be 5y and 6y
So,
$80\%x = 6y$
$x = \frac{30y}{4} \Rightarrow x = 7.5y$
Required percentage $= \frac{7.5y - 5y}{5y} \times 100$
$= \frac{2.5y}{5y} \times 100 = 50\%$

64. (d); Total expenditure = 80% of salary
Expenditure excluding clothing
$= 80\% - \frac{25}{100} \times 80\% = 60\%\ of\ savings$
Ramesh savings $= \frac{3600}{60} \times 20 = 1200\ Rs$

65. (d); Total no. of hats sold on Wednesday
= 64 + 48 = 112
Total no. of hats sold on Tuesday
= 60 + 36 = 96
Desired Percentage $= \frac{112-96}{96} \times 100$
$= 16\frac{2}{3}\%$

66. (b); No. of hats sold on Friday by A after increase = 56 $\times \frac{8}{7}$
= 64
Average no. of hats sold on Monday, Wednesday and Friday by A
$= \frac{46+64+64}{3} = \frac{174}{3} = 58$

67. (e); No. of hats sold on Saturday
$= 112 \times \frac{15}{14} = 120$

68. (c); No. of hats sold on Monday & Wednesday by B
= 34 + 48 = 82
No. of hats sold on Friday by A and B together
= 56 + 40 = 96
Desired Difference = $96 - 82 = 14$

69. (a); Hats sold on Thursday that are not defected
$= \frac{20}{100} \times 60 + \frac{25}{100} \times 52$
12 + 13 = 25

70. (b); No. of hats sold on Tuesday & Friday by A
= 36 + 56 = 92
No. of hats sold on Tuesday & Friday by B
= 60 + 40 = 100
Desired Ratio = 92 : 100 = 23 : 25

ENGLISH LANGUAGE

71. (b); Refer to the third sentence of first paragraph. "Unemployment does not……labour market". Hence sentence (b) is true.

72. (c); Refer to the last sentence of the last paragraph. "This is the only area….. market problems" Hence option (c) is true.

73. (b); Refer to the fourth sentence of first paragraph. "Increasing affluence……dimensions of hardships". Hence option (b) is true.

74. (e); Refer to the third sentence of second paragraph. "Low wages……self support". Hence option (e) is true.

75. (d); Refer to the last paragraph. "It is uncertain …….. economic stimulus". Hence option (d) is true.

76. (e); It can be clearly inferred from the passage our social statistics underestimate the degree of labor-market-related hardship. Hence sentence (e) is true in context of the passage.

77. (b); Dire means extremely serious and urgent. Hence it has same meaning as terrible. Clamant means urgently demanding attention. Exigent means demanding.

78. (a); Mitigate means making less severe, serious. Alleviate is much closer to it. Surfeit,glut means an excess amount of something. Incite means encourage.

79. (c); Inability means unable to do something. Competence means ability to do something. Hence it has opposite meaning as Inability. Frailty means condition of being weak. Malaise means feeling of discomfort. Sycophancy means obedient behavior towards something.

80. (a); Contentious means causing or likely to cause an agreement. Hence it has opposite meaning as agreeable. Combative means ready or eager to fight. Fierce means violent aggressiveness.

81. (a); Change 'would have' into 'had'.

82. (a); 'bade' takes 'plain infinitive' (V1) after it and not 'infinitive' (to + infinitive). So, change 'to submit' into 'submit'.

83. (d); Use 'no room' in place of 'no place'. Room means 'enough empty space for people or things to be fitted in.'

84. (a); Change 'respectively' into 'respectfully'.
Respectively: in the order already mentioned
Respectfully: Marked by respect

85. (e); No error.

86. (a); Replace 'a' with 'the'. Since, the given sentence talks about a particular hotel (the one which was inaugurated by the Prime Minister) hence, definite article should be used

87. (e); No error.

88. (e); No error.

89. (c); Replace 'they' with 'it'. Since, here the subject is 'The deepest ocean blue' which is singular.

90. (d); Change 'of' to 'on'

91. (b); "**may be as great or greater in our homes than**" is the correct phrase that fits into the sentence quite comprehensively. If we go by the options considering their grammar syntax, only option (III) fits into the sentence perfectly adding the required meaning to the sentence. The first two phrases are grammatically incorrect as they bear no relevance to the meaning of the sentence. Hence (b) is the correct choice.

92. (b); "**believed that a crime created**" is the correct phrase that makes the sentence grammatically correct. It is to be noted that the sentence is in Past tense. The phrase "Primitive man" means "Ancient man" which indicates that it should be followed by the verb agreeing with the subject. Among the three options, both the phrases (I) and (III) do not make a proper substitution to the sentence. Hence (b) is the correct choice.

93. (e); None of the given options is correct as all three of them do not agree with the correct grammar structure to make the sentence grammatically correct. The correct phrase should be "**were more afflicting**" as 'Calamities' and 'Indigence' make plural subjects and hence verb should also be plural. Hence (e) is the correct option.

94. (c); Both the phrases "**Since the candidate has failed**" and "**If the candidate fails**" can substitute the given blank to make the sentence grammatically correct and contextually meaningful. It is to be noted that the sentence is conditional. So the correct syntax is **[If+S+V_1, S+will+V_1].** Hence (c) is the correct option.

95. (b); If we follow the correct sentence structure, only the phrase "**it is against**" provides the most apt meaning to the sentence. Hence (b) is the correct option.

96. (a); "**difficulties of managing**" is the correct phrase to make the sentence grammatically correct. In the context of the correct grammar usage in the sentence, "of" is the correct preposition. However, the phrases (II) and (III) make no relevance to the actual meaning of the sentence. Hence (a) is the correct option.

97. (e); All the three phrases can fill up the provided blank to make the sentence grammatically correct and contextually meaningful. It is to be noted that all the three phrases given as options mean the same. Hence (e) is the correct option.

98. (c); Both the phrases "**A realist that I am**" and "**Being a realist**" can be substituted into the sentence to make it grammatically correct. Both the phrases mean the same and provide an appropriate meaning to the sentence. However, the third phrase is structurally incorrect. Hence (c) is the correct option.

99. (b); "**implementing those quickly**" is the correct phrase that makes the sentence grammatically correct. It is to be noted that the phrases are connected with the conjunction "and", thus the subjects need to follow the similar syntax i.e. "**Taking good decisions and implementing those quickly**…" The other two phrases are structurally incorrect. Hence (b) is the correct choice.

100. (d); Both the phrases "**has always been**" and "**is**" are the correct replacement to the blank provided in the sentence. Both the helping verbs make the sentence grammatically correct and contextually meaningful. The third phrase is incorrect as it doesn't agree with the Subject "Innovation" which is singular in number. Hence (d) is the correct option.

Mock 18

IBPS PO Prelims 2016

REASONING ABILITY

Directions (1-5): In these questions, relationship between different elements is shown in the statements. The statements are followed by conclusions. Study the conclusions based on the given statements and select the appropriate answer. Give answer-
(a) If only conclusion II is true
(b) If only conclusion I is true
(c) If both conclusions I and II are true.
(d) If either conclusion I or II is true
(e) If neither conclusion I nor II is true.

1. **Statements:** S ≤ L ≤ I = P ≥ E > R; L > Q
Conclusions: I. P ≥ S II. I > R

2. **Statements:** G > R ≥ E = A ≤ T ≤ S; D ≤ A ≤ J
Conclusions: I. T ≥ D II. R > S

3. **Statements:** A ≥ B > C ≤ D ≤ E < F
Conclusions: I. A ≥ E II. C < F

4. **Statements:** G > R ≥ E = A ≤ T ≤ S; D ≤ A ≤ J
Conclusions: I. J > G II. J = G

5. **Statements:** S ≤ L ≤ I = P ≥ E > R; L > Q **Conclusions:**
I. L < R II. E ≥ Q

Directions (6-10): Study the following information carefully and answer the questions below.
Eight people- A, B, C, D, W, X, Y and Z are sitting in a circle facing the centre. All eight people are from different place i.e. Okhla, Dwarka, Lajpat Nagar, Chanakyapuri, Saket, Mehrauli, Rohini and Karol Bagh but not necessarily in the same order.
W is sitting third to the left of Y. The person who is from Dwarka is to the immediate right of W and W is not from Okhla. B is sitting fourth to the right of Z. Z is not the neighbor of Y. Neither B nor Z is an immediate neighbor of W. X is from Chanakyapuri and is sitting third to the right of the person from Dwarka. The person from Mehrauli is sitting second to the left of person from Chanakyapuri. The person from Rohini is sitting second to the left of W. A who is Lajpat Nagar is sitting exactly between X and Z. The person from Saket is sitting second to the right of the person from Lajpat Nagar. C is sitting third to the left of X.

6. Who amongst the following persons belongs to Okhla?
(a) Y (b) D (c) C
(d) B (e) None of these

7. What is A's position with respect to B?
(a) Third to the right (b) Second to the right
(c) Third to the left (d) Second to the left
(e) Fourth to the right

8. How many people are sitting between Z and C when counted anticlockwise direction From C?
(a) One (b) Two (c) Three
(d) Four (e) None

9. Four of the following five pairs are alike in a certain way based on their positions in the above arrangement and so from a group. Which of the following does not belong to that group?
(a) B-Rohini (b) Z – Mehrauli (c) D - Okhla
(d) Y – Saket (e) X - Dwarka

10. Which of the following statements is false according to the above-mentioned arrangement?
(a) C is to the immediate right of the person from Karol Bagh
(b) The person from Lajpat Nagar is third to the right of the person from Mehrauli.
(c) The person from Dwarka is sitting exactly between the Karol Bagh and the Saket.
(d) D is neither from Chanakyapuri nor from Karol Bagh.
(e) There are only three people between A and C.

Directions (11-15): In each question below are given two/three statements followed by two conclusions numbered I and II. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements, disregarding commonly known facts. Give answer
(a) if only conclusion I follows.
(b) if only conclusion II follows.
(c) if either conclusion I or II follows.
(d) if neither conclusion I nor II follows.
(e) if both conclusions I and II follow.

11. **Statements:** All circles are a triangle.
Some triangle is rectangle.
All rectangles are square.
Conclusions:
I. All rectangles being triangles is a possibility.
II. All circles being square is a possibility.

12. **Statements:** Some chair is table.
Some bed is table. No furniture is bed.
Conclusions:
I. All chairs being furniture is a possibility.
II. Some Table is not Bed is a possibility.

13. Statements: All circles are a triangle.
Some triangle is rectangle.
All rectangles are square.
Conclusions:
I. Some triangles are not rectangle.
II. No square is a circle.

14. Statements: All art are theater.
Some art are drama.
Conclusions:
I. All drama being theater is a possibility.
II.Some dramas are theater.

15. Statements: Some chair is table.
Some bed is table. No furniture is bed.
Conclusions:
I. some table is not furniture.
II. All table being furniture is a possibility.

Directions (16-18): Read the given information carefully and answer the given question.
B is 25 m south of A. C is 10 m east of B. D is 30 m north of C. E is 7 m east of D. X is 18 m south of E. M is 12 m south of X. C is 7 m west of M.

16. B is in which direction from Point D?
(a) South (b) South-West
(c) North-East (d) South-East
(e) North

17. If Point W is 3 m to the north of A, then what is the distance between B and W?
(a) 28 m (b) 15 m (c) 21 m
(d) 24 m (e) 17 m

18. What is distance between B and M
(a) 17 m (b) 15 m (c) 21 m
(d) 19 m (e) 13 m

Directions (19–23): Study the following information to answer the given questions
S, T, U, V, W, X, Y and Z are sitting in a straight line equidistant from each other (but not necessarily in the same order). Some of them are facing south while some are facing north.
(Note : Facing the same direction means, if one is facing north then the other also faces north and vice-versa. Facing the opposite directions means, if one is facing north then the other faces south and vice-versa)
S faces north. Only two people sit to the right of S. T sits third to the left of S. Only one person sits between T and X. X sits to the immediate right of W. Only one person sits between W and Z. Both the immediate neighbors of T face the same direction. U sits third to the left of X. T faces the opposite direction as S. Y does not sit at any of the extremes ends of the line. V faces the same direction as W. Both Y and U face the opposite direction of Z.

19. How many persons in the given arrangement are facing North?
(a) More than four (b) Four
(c) One (d) Three
(e) Two

20. Four of the following five are alike in a certain way, and so form a group. Which of the following does not belong to the group?
(a) W, X (b) Z, Y (c) T,
(d) T, Y (e) V, U

21. What is the position of X with respect to Z?
(a) Second to the left (b) Third to the right
(c) Third to the left (d) Fifth to the right
(e) Second to the right

22. Who amongst the following sits exactly between Z and W?
(a) T (b) Y (c) X
(d) W (e) U

23. Who is sitting 2nd to the right of T?
(a) Z (b) V (c) X
(d) W (e) None of these.

Directions (24-26): Study the following information and answer the given questions.
- D is daughter of N. E is wife of N.
- G is sister of D. C is married to G.
- N has no son. K is mother of E.
- Q is only daughter of C.

24. How Q is related to D?
(a) Daughter (b) Cousin (c) Niece
(d) Sister in law (e) Cannot be determined

25. How N is related to K?
(a) Brother-in-law (b) Cousin
(c) Son-in-law (d) Sister (e) Brother

26. How many daughters N have?
(a) One (b) Three (c) Two
(d) Cannot be determined
(e) None of these

Directions (27-29): There are six wires in a table A, B, C, D, E and F they have different length but not necessarily in the same order. E is greater than C but less than D and B. A is greater than D and B. A is not longest wire. F is 13 cm long and E is 4 cm long.

27. If D is 5cm less than F what would be the length of D?
(a) 7 (b) 8 (c) 9
(d) Can't be determined
(e) None of these

28. Which wire has least length?
(a) B (b) A (c) C
(d) E (e) None of these.

29. If A is 10 cm in length and B is 5 cm in length then what would be the length of C?
(a) 6 (b) 2 (c) 7
(d) 9 (e) None of these

Directions (30-35): Study the given information carefully to answer the given question.
M, N, O, P, Q, R and S are seven people live on seven different floors of a building but not necessarily in the same order. The lower most floor of the building is numbered 1, the one above that is numbered 2 and so on till the topmost floor is numbered 7. Each one of them have different income i.e. 3500, 15000, 7500, 9000, 11000, 13500 and 5000. (But not necessarily in the same order.)
M lives on an odd numbered floor but not on the floor numbered 3. The one who has income of 11000 lives immediately above M. Only two people live between M and the one who has income of 7500.
The one, who has income of 15000 lives on one of the odd numbered floors above P. P lives on odd numbered floor. Only three people live between O and the one who has income of 15000. The one, whose income is 7500 lives immediately above O. The one, who has income of 3500 lives immediately above the one, who has income of 5000.S lives on an odd numbered floor but not on 3rd floor. Only one person lives between N and Q. N lives on one of the floors above Q. Neither O nor M has income of 9000. Q does not have income of 7500.

30. How much income M has?
(a) 13500 (b) 5000 (c) 7500
(d) 15000 (e) 3500

31. Which of the following combinations is true with respect to the given arrangement?
(a) 13500 - O (b) 15000 – R (c) 5000 - S
(d) 11000 - P (e) 9000 - N

32. If all the people are made to sit in alphabetical order from top to bottom, the positions of how many people will remain unchanged?
(a) Four (b) None (c) Two
(d) One (e) Three

33. Which of the following statements is true with respect to the given arrangement?
(a) The one who has income of 5000 lives immediately below M.
(b) R has income of 15000.
(c) None of the given options is true.
(d) Only four people live between P and S.
(e) S lives immediately below Q.

34. Who amongst the following lives on the floor numbered 2?
(a) N
(b) The one who has income of 3500
(c) The one who has income of 5000
(d) P
(e) R

35. How much income R has?
(a) 13500 (b) 5000 (c) 7500
(d) 15000 (e) 3500

QUANTITATIVE APTITUDE

Directions (36 –40): Study the table and answer the given questions.
Data related to candidates appeared and qualified from State 'x' in a competitive exam during 5 years

Years	No. of appeared candidates	% of appeared candidates who qualified	Respective ratio of number of qualified male and number of qualified female candidates
2006	700	--	3:2
2007	--	--	5:3
2008	480	60%	--
2009	--	42%	9:5
2010	900	64%	--

36. In 2010, if the number of female qualified candidates was 176, what was the respective ratio of number of male qualified candidates and number of female qualified candidates?
(a) 25 : 16 (b) 5 : 4 (c) 25 : 11
(d) 21 : 16 (e) 17 : 11

37. The number of appeared candidates increased by 40% from 2006 to 2011. If 25% of the appeared candidates qualified in 2011, what was the number of qualified candidates in 2011?
(a) 240 (b) 225 (c) 255
(d) 245 (e) 230

38. In 2007, the respective ratio of number of appeared candidates to the qualified candidates was 5 : 4. Number of female qualified candidates constitutes what per cent of number of appeared candidates in the same year?
(a) 20 (b) 25 (c) 30
(d) 15 (e) 40

39. In 2009, if the difference between number of male qualified candidates and female qualified candidates was 72, what was the number of appeared candidates in 2009?
(a) 800 (b) 900 (c) 850
(d) 600 (e) 950

40. If the average number of qualified candidates in 2006 and 2008 was 249, what per cent of appeared candidates qualified in the competitive exam in 2006?
(a) 40 (b) 30 (c) 20
(d) 35 (e) 25

41. 28 men can complete a piece of work in 15 days and 15 women can complete the same piece of work in 24 days. What is the respective ratio between the amount of work done by 30 men in 1 day and the amount of work done by 18 women in 1 days?
(a) 10 : 7 (b) 3 : 5 (c) 5 : 4
(d) 9 : 5 (e) None of these

42. Train A which is 320m long can cross a pole in 16 seconds. If it halts 5 times each time for exactly 18 minutes, how many hours will it take to cover a distance of 576 kms? (in hours)
(a) 8 (b) $10\frac{1}{2}$ (c) $8\frac{1}{2}$
(d) 9 (e) $9\frac{1}{2}$

43. In a village, 70% registered voters cast their votes in the election. Only two candidates (A and B) contested the election. A won the election by 400 votes. Had A received 12.5% less votes, the result would have been tie. How many registered voters are there in the village?
(a) 4200 (b) 4500 (c) 4000
(d) 4250 (e) 3500

44. Two mobile phones were purchased at the same price. One was sold at a profit of 30% and the second was sold at a price which was Rs 2500 less than the price at which the first was sold. If the overall profit earned by selling both the mobile phones was 5%, what was the cost price of one mobile phone?
(a) Rs 8000 (b) Rs 5000 (c) Rs 6000
(d) Rs 4500 (e) Rs 5500

45. A took a certain sum as loan from bank at a rate of 8% Simple Interest per annum. A lends the same amount to B at 12% Simple interest per annum. If at the end of the five years. A made profit of Rs 800 form the deal, how much was the original sum?
(a) Rs 6500 (b) Rs 4000 (c) Rs 6200
(d) Rs 6000 (e) Rs 4500

Direction (46-50): In each of these questions, two equations (1) and (II) are given. You have to solve both the equations and give answer.
(a) If $x > y$
(b) If $x \geq y$
(c) If $x < y$
(d) If $x \leq y$
(e) If $x = y$ or relationship between x and y cannot be established.

46. I. $x^2 - 3481 = 0$
II. $3y^2 = \sqrt[3]{216000}$

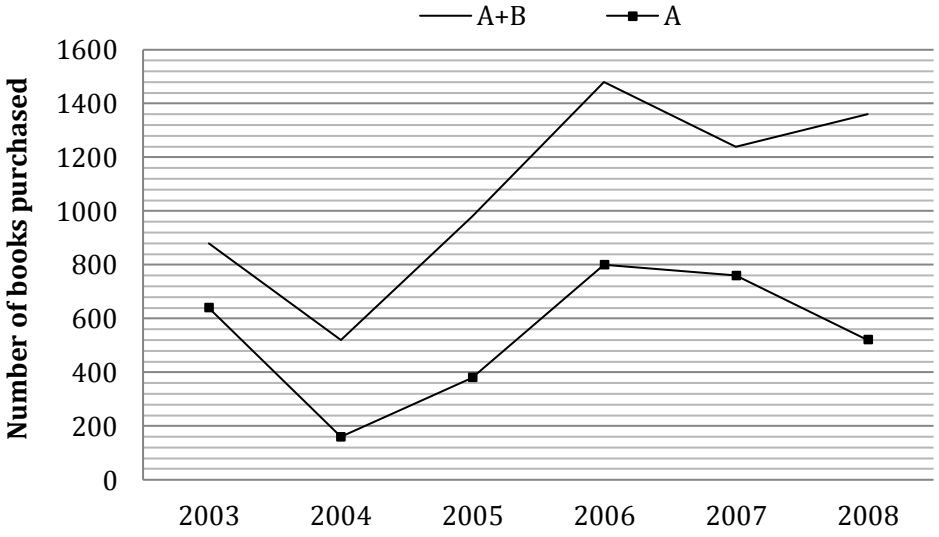
47. I. $20x^2 - 67x + 56 = 0$
II. $56y^2 - 67y + 20 = 0$

48. I. $x^2 = 14641$
II. $y = \sqrt{14641}$

49. I. $x^2 + 42 = 13x$
II. $y = \sqrt[4]{1296}$

50. I. $15x^2 - 46x + 35 = 0$
II. $4y^2 - 15y + 14 = 0$

Directions (51 – 55) : Refer to the graph and answer the given questions.
Data related to number of books purchased for two libraries (A and B) during 6 years



51. What is the respective ratio between total number of books purchased for libraries A and B together in 2003 and total number of books purchased for the same libraries together in 2007?
(a) 22 : 31 (b) 24 : 31
(c) 11 : 17 (d) 11 : 19
(e) 22 : 35

52. What is the average number of books purchased for library A during 2004, 2005, 2007 and 2008?
(a) 465 (b) 455 (c) 460
(d) 445 (e) 450

53. Out of the total number of books purchased by libraries A and B together in 2008; only 20% are graphic novels. What is the total number of graphic novels purchased for libraries A and B together in 2008?
(a) 324 (b) 312 (c) 272
(d) 336 (e) 288

54. Number of books purchased for library B increased by what per cent from 2003 to 2006 ?
(a) $175\frac{1}{3}$ (b) $172\frac{1}{3}$ (c) $196\frac{2}{3}$
(d) $183\frac{1}{3}$ (e) $194\frac{2}{3}$

55. Number of books purchased for library B is what per cent of the number of books purchased for library A in 2006 ?
(a) 30 (b) 75 (c) 55
(d) 40 (e) 85

56. The simple interest accrued on an amount of Rs 16500 at the end of 3 years is Rs 5940. What would be the compound interest accrued on the same amount at the same rate in the same period? (rounded off to two digits after decimal).
(a) Rs 6681.31 (b) Rs 6218.27
(c) Rs 6754.82 (d) Rs 6537.47
(e) None of these

57. Area of rectangle is 96 square metres. When the length of the same rectangle is increased by 6 metres and the breadth is decreased by 3 metres, then the area of rectangle decreases by 30 square metres. What is the perimeter of a square whose sides are equal to the length of the rectantgle?
(a) 48 m (b) 60 m (c) 80 m
(d) 64 m (e) 52 m

58. Abhay gave 30% of his money to Vijay, Vijay gave $\frac{2}{3}$rd of what he received to his mother. Vijay's mother gave $\frac{5}{8}th$ of the money she received from Vijay to the grocer. Vijay's mother is now left with Rs 600. How much money did Abhay have initially?
(a) Rs 6,200 (b) Rs 8,000 (c) Rs 6,000
(d) Rs 8,200 (e) Rs 10,200

59. Four years ago, the respective ratio between the age of Ram and that of Sonu, was 4 : 9. Tina is ten years older than Ram. Tina is ten years younger than Sonu. What is Tina's present age?
(a) 40 years (b) 36 years (c) 30 years
(d) 20 years (e) 42 years

60. A and B started a business with investments of Rs 3500 and Rs 2500 respectively. After 4 months C joined with Rs 6000. If the difference between C's share and B's share in the annual profit was Rs 1977, what was the total annual profit?
(a) Rs 15620 (b) Rs 16240 (c) Rs 14690
(d) Rs 12770 (e) Rs 13180

Directions (61-65): What will come in place of the question mark (?) in the following number series ?

61. 8, 10, 18, 44, 124, (?)
(a) 344 (b) 366 (c) 354
(d) 356 (e) None of these

62. 13, 25, 61, 121, 205, (?)
(a) 323 (b) 326 (c) 324
(d) 313 (e) None of these

63. 656, 352, 200, 124, 86, (?)
(a) 67 (b) 59 (c) 62
(d) 57 (e) None of these

64. 454, 472, 445, 463, 436, (?)
(a) 436 (b) 456 (c) 454
(d) 434 (e) None of these

65. 12, 18, 36, 102, 360, (?)
(a) 1364 (b) 1386 (c) 1384
(d) 1376 (e) None of these

Directions (66-70): What approximate value should come in place of the question mark (?) in the following questions?

66. $(1814.9 \div 121) \times 35.78 \div 45.1023 = ?$
(a) 12 (b) 25 (c) 10
(d) 30 (e) 40

67. $3945 + 150 \times 40 - 35.5 = ?$
(a) 9000 (b) 10000 (c) 9500
(d) 9900 (e) 9950

68. $(63)^2 \times 3.91 = ?$
(a) 14070 (b) 15080 (c) 13040
(d) 14089 (e) 15800

69. $3.5 \times 0.7 \div 1.7 = ?$
(a) 4 (b) 3 (c) 1.5
(d) 5 (e) 2.5

70. 64% of 159.96 +72% of 65.005 + $(1.4)^2 - (0.4)^2$ = ?
(a) 131 (b) 141 (c) 151
(d) 161 (e) 171

ENGLISH LANGUAGE

Directions (71-78): Read the following passage carefully and answer the questions given below it. Certain words are given in bold to help you locate them while answering some of the questions.

Recent events — the UP government's waiver of farmer loans, dramatic protests by Tamil Nadu farmers in Delhi and a warning from the RBI Governor against loan waivers — have once again brought farm loan write-offs under public glare.

Farm loans may be crop loans or investment loans taken to buy equipment. Both farmers and banks reap a good harvest when all is well. But when there is a poor monsoon or natural calamity, farmers may be unable to repay loans. The rural distress in such situations often prompts States or the Centre to offer relief — reduction or complete waiver of loans. Essentially, the Centre or States take over the **liability** of farmers and repay the banks. Waivers are usually selective — only certain loan types, categories of farmers or loan sources may qualify.

Agriculture in India has been facing many issues — fragmented land holding, depleting water table levels, deteriorating soil quality, rising input costs, low productivity. Add to this **vagaries** of the monsoon. Output prices may not be remunerative. Farmers are often forced to borrow to manage expenses. Also, many small farmers not eligible for bank credit borrow at **exorbitant** interest rates from private sources. When nature rides roughshod over debt-ridden farmers in the form of erratic monsoon and crop failures, they face grim options. Indebtedness is a key reason for the many farmer suicides in the country.

Loan waivers provide some relief to farmers in such situations, but there are debates about the long-term effectiveness of the measure. Critics demand making agriculture sustainable by reducing inefficiencies, increasing income, reducing costs and providing protection through insurance schemes. They point out that farm loan waivers are at best a temporary solution and **entail** a moral hazard — even those who can afford to pay may not, in the expectation of a waiver. Such measures can erode credit discipline and may make banks wary of lending to farmers in the future. It also makes a sharp dent in the finances of the government that finances the write-off. A blanket waiver scheme is detrimental to the development of credit markets. Repeated debt-waiver programmes distort households' incentive structures, away from productive investments and towards unproductive consumption and wilful defaults. These wilful defaults, in turn, are likely to disrupt the functioning of the entire credit system.

The real crisis for Indian farmer is that he or she is not in control of the produce, unlike other businesses, and is dependent on cartel of traders to fetch a decent price. The cartel makes money in case of good or bad crop season as their margins remain intact. In fact, in case of a crop failure the trader profit margin rises whereas the farmer is in distress without remunerative price. The governments – Centre and states – have repeatedly failed to break the cartelisation and their effort to create farm infrastructure through cold stores has helped the corporate sector more than the farmers. Except some farmers in Maharashtra and Punjab, most of the cold stores built with help of the government subsidy are owned by corporates. So, now these corporates are buying produce in farms at cheap rates, keep them in cold stores, repackage them and sell them in malls in cities at thrice the purchase price. Neither the farmer gains nor the consumer.

To be sure, the agriculture sector needs government support but loan waivers are not the solution. On the contrary, expenditure on loan waivers will eventually leave less fiscal space for public expenditure in agriculture. India needs massive investment in areas such as irrigation, water conservation, better storage facilities, market connectivity and agricultural research. The problems in Indian agriculture are structural. They need long-term solutions. Loan waivers will only end up complicating the problem. The Indian economy has suffered a lot due to competitive populism in the past. It's time parties and governments address the real issues.

71. According to the passage, why there is a need of waiving the loans of the farmers?
(a) So that agricultural sector and economy do not get affected.
(b) Incapability of farmers to repay the loans due to natural disasters.
(c) As Private firms pressurize to repay the loans.
(d) To meet the long term solutions of farmers.
(e) All of the above.

72. What are the disadvantages related to the loan waiver scheme?
(a) It can abrade credit regulation and may make banks wary of lending to farmers in the future.
(b) It leads to less involvement of farmers for credit benefit from banks in the future.
(c) The loan waiver scheme perverts the households' incentive structure and leads to unproductive consumption.
(d) Both (a) and (c) are correct.
(e) All are true.

73. According to the passage, what needs to be done in order to resolve the issue?
(i) Banks should lend the appropriate amount of credit to farmers.
(ii) There should be Long term solutions of structural problems of agriculture.
(iii) Investment in areas like irrigation, water conservation, better storage facilities, etc.
(a) Only (i) is correct
(b) Only (ii) is correct
(c) Both (i) and (ii) are correct
(d) Both (ii) and (iii) are correct
(e) All are correct

74. Which is the most appropriate title of the passage?
(a) Need for farm loan write-offs.
(b) The hazards of farm loan waivers.
(c) The real crises of Indian farmers.
(d) A Blanket waiver scheme.
(e) A Dramatic protests by Tamil Nadu farmers.

75. Which of the following statements is **false** in context of the passage?
(a) For the rural distress, The Centre or States take over the culpability of farmers and repay the banks.
(b) To regulate the expenses, farmers are forced to borrow.
(c) A blanket waiver scheme is detrimental to the development of credit markets.
(d) Loan Waivers will end up simplifying the problem of farmers and economy.
(e) All are correct.

76. According to the passage, what are the present bottlenecks faced by the Indian farmers?
(i) Corporates buying the produce at cheap rates and selling them at higher price, hence affecting the farmers.
(ii) Lack of policy implementation by the government.
(iii) Government's failed efforts to break cartelization.
(a) Only (i) is true
(b) Only (ii) is true
(c) Both (i) and (iii) are true
(d) Both (ii) and (iii) are true
(e) All are true

Directions (77-78): Choose the word/group of words which is most similar in meaning to the word/group of words printed in bold as used in passage.

77. Exorbitant
(a) Quirk (b) Unbounded
(c) Prohibitive (d) Outrageous
(e) Needless

78. Vagaries
(a) Profuse (b) Superfluous
(c) Caprice (d) Trivial
(e) lavish

Directions (79-83): Rearrange the following six sentences A, B, C, D, E and F in a proper sequence to form a meaningful paragraph. Then answer the questions given below:-

A. While the candidature of Bihar Governor Ram Nath Kovind on behalf of the ruling party was a surprise, the response from the opposition in naming former Lok Sabha Speaker Meira Kumar was anything but that.
B. It may have the trappings of an ideological battle, but the 2017 presidential election has become a platform for political messaging.
C. With the Bharatiya Janata Party fielding an old party hand from the Dalit community, the opposition parties led by the Congress felt constrained to follow suit.
D. However, Prime Minister Narendra Modi and BJP president Amit Shah chose someone less known but from a disadvantaged community, with the clear intent of garnering the support of those outside the fold of the National Democratic Alliance, who cannot afford to be seen to be opposing a Dalit.
E. They may have hoped that the BJP would field someone from its old guard, in order to set the stage for a contest between a candidate 'swathed in saffron' and one with a secular report card.
F. This lent the unfortunate impression that the Congress and other parties had no clear choice of their own, and were only waiting to react.

79. Which of the following should be the **FIRST** statement after rearrangement?
(a) A (b) E (c) B
(d) D (e) F

80. Which of the following should be the **FOURTH** statement after rearrangement?
(a) B (b) D (c) E
(d) F (e) C

81. Which of the following should be the **SIXTH** statement after rearrangement?
(a) E (b) C (c) A
(d) F (e) D

82. Which of the following should be the **THIRD** statement after rearrangement?
(a) E (b) C (c) D
(d) A (e) B

83. Which of the following should be the **SECOND** statement after rearrangement?
(a) A (b) F (c) C
(d) E (e) B

Direction (84-92): Read each of the following sentences to find out whether there is any error in it. The error, if any, will be in one part of the sentence. Choose the incorrect part as your answer. If there is no error, the answer is 'e'. (Ignore, the error of punctuation, if any).

84. Having worked (a)/ for the whole day (b)/ you could have taken some rest (c)/ and start work the next day. (d)/ No error. (e)

85. Scarcely had he (a)/ gone a few steps (b)/ that he was told by someone (c)/ that his mother was no more. (d)/ No error. (e)

86. Seldom or (a)/ ever have I tried my (b)/ best to defend my friends, who are after (c)/ all guilty to some extent. (d)/ No error. (e)

87. Dogs soon know (a)/ the person whom (b)/ they are (c)/ kindly treated. (d)/ No error. (e)

88. If she had told me that (a)/ her husband never lived (b)/ within his means, I would not (c)/ have lent him the money. (d)/No error. (e)

89. I could not recall (a)/what she has told (b)/me about her (c)/concern with Moti. (d)/No error. (e)

90. There were only two (a)/ soldiers but each and every (b)/ soldier was equal (c)/ to five policemen. (d)/ No error. (e)

91. The boy was trembling (a)/ with anger when she drowned (b)/ all his books (c)/ and articles. (d)/ No error. (e)

92. When asked, he (a)/ took tea (b)/ and said that it (c)/ tasted sweetly. (d)/ No error. (e)

Directions (93-100) : In the following passage there are bold words, each of which has been numbered. These numbers are printed below the passage and against each, five words are suggested, one of which replaces the bold word appropriately. Find out the appropriate word.

Karl Heinrich Marx (1818-1883) was the last of the great **evaluator (93)** in the Western intellectual **service (94)**. His ideas **exerted (95)** a decisive influence on all aspects of human **target (96)**, and transformed the study of history and society. They significantly changed anthropology, the arts, cultural studies, history, law, literature, philosophy, political economy, political theory and sociology by **determining (97)** a link between economic and intellectual life.

By developing a **theory (98)** of praxis, i.e. unity of thought and action, Marx brought about a sea change in the entire **scheme (99)** of the social sciences. However, from its very inception Marxism had to **promote (100)** criticism and critical acclaim.

93. (a) heroes (b) critics (c)experts (d)analyzers (e) No correction

94. (a)tradition (b)creed (c)convention (d)belief (e)No correction

95. (a)threw (b)worked (c)strived (d)executed (e)No correction.

96. (a)wish (b)purpose (c)endeavor (d)pursuit (e)No correction

97. (a)installing (b)designating (c)encouraging (d)establishing (e)No correction

98. (a)basis (b)conjecture (c)essence (d)nexus (e)No correction

99. (a)process (b)methodology (c)policy (d)structure (e)No correction

100. (a)relish (b)swallow (c)allow (d)countenance (e)No correctio

Solutions

REASONING ABILITY

1. (c); I. P ≥ S (True) **II.** I > R (True)

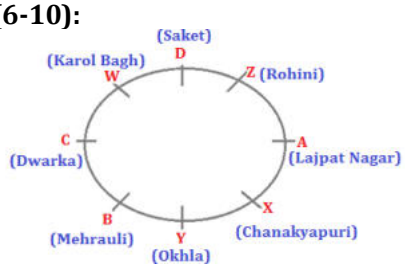
2. (b); I. T ≥ D (True) **II.** R > S (False)

3. (a); I. A ≥ E (False) **II.** C < F (True)

4. (e); I. J > G (False) **II.** J = G (False)

5. (e); I. L < R (False) **II.** E ≥ Q (False)

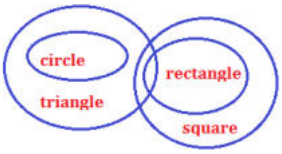
Directions (6-10):



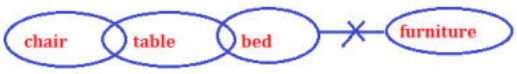
6. (a); 7. (a); 8. (d);

9. (e); 10. (c);

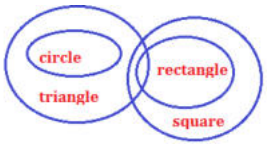
11. (e);



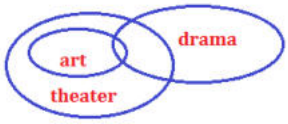
12. (e);



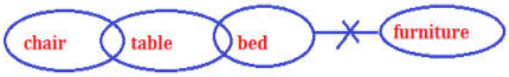
13. (d);



14. (e);

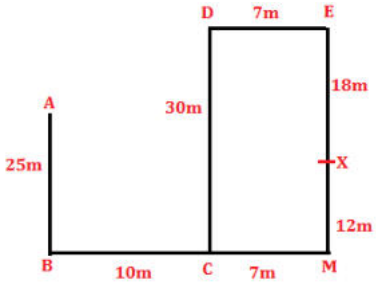


15. (a);

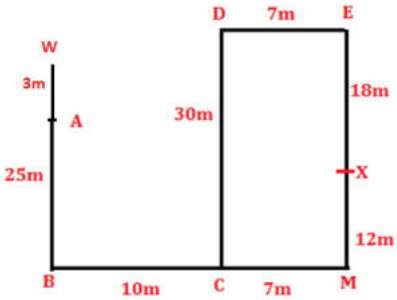


Directions (16-18):

16. (b);

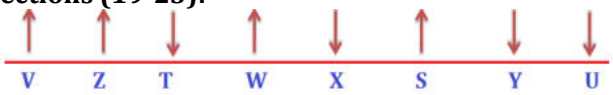


17. (a);



18. (a);

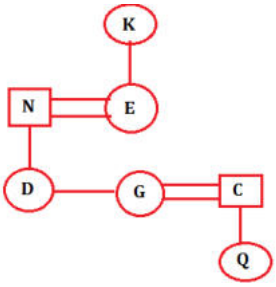
Directions (19-23):



19. (b); **20. (d);** **21. (b);**

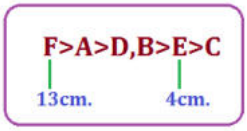
22. (a); **23. (b);**

Directions (24-26):



24. (c); **25. (c);** **26. (c);**

Directions (27-29):



27. (b); **28. (c);** **29. (b);**

Directions (30-35):

FLOOR	PERSON	SUBJECTS
7	S	9000
6	N	11000
5	M	15000
4	Q	3500
3	P	5000
2	R	7500
1	O	13500

30. (d); **31. (a);** **32. (c);**

33. (c); **34. (e);** **35. (c);**

QUANTITATIVE APTITUDE

36. (c); No. of qualified candidates in = 2010
$= 64 \times 9 = 576$
$\therefore no.of\ \ males = 576 - 176$
$= 400$
$\therefore Required\ Ratio = 400 : 176$
$= 25 : 11$

37. (d); No. of appeared candidates in 2011
$= \frac{140}{100} \times 700 = 980$
Required no. of candidates $= \frac{25}{100} \times 980$
$= 245$

38. (c); Let appeared candidates from 2007 = 500
$\therefore$ Let qualified candidates from 2007 = 400
$\therefore$ No. of female qualified from 2007
$= \frac{3}{8} \times 400 = 150$
$\therefore Required\ \% = \frac{150}{500} \times 100 = 30\%$

39. (d); Let no. of males qualified in 2009 = $9x$
$\therefore$ No. of females qualified in 2009 = $5x$
$\therefore 9x - 5x = 72$
$4x = 72$
$x = 18$
$\therefore No.of\ candidates\ qualifed\ in$ 2009

$= 14x$
$= 14 \times 18$
$= 252$
$\therefore Required\ no.of\ candidates = \frac{252}{42} \times 100$
$= 600$

40. (b); let candidate who qualified in 2006= x
candidate who qualified in 2008
$= 480 \times 0.6 = 288$
x= 498-288 = 210
required percent= $\frac{210}{7}$= 30%

41. (a); $28\ M \rightarrow \frac{1}{15}$
$M \rightarrow \frac{1}{28\times15}$
And,
$15W \rightarrow \frac{1}{24}$
$W \rightarrow \frac{1}{15\times24}$
Amount of work done by 30 men in 1 day
$= \frac{30}{28\times15} = \frac{1}{14}$
$Amount\ of\ work\ done\ by\ 18\ women\ in\ 1\ day$
$= \frac{18}{15\times24} = \frac{1}{20}$
$Required\ ratio = \frac{1}{14} : \frac{1}{20}$
$= 10 : 7$

42.(e); Speed of train = $\frac{320}{16}$
$=$ 20 m/sec
$= 20 \times \frac{18}{5}$ km/hr
= 72 km/hr
Time spent in haltage = 18 ×5
= 90 mins
$= \frac{3}{2}$ hrs
$Total\ time\ taken\ to\ cover\ 576\ km$
$= \frac{576}{72} + \frac{3}{2}$
$= 9\frac{1}{2}$ hours

43. (c); Let votes received by A = x
Votes received by B = $x - 400$
$\therefore x = \frac{200}{12.5} \times 100$
$x = 1600$
(total registered votes) $\times \frac{70}{100} = 1600 + 1200$
Required votes = $\frac{2800\times100}{70}$
$=$ 4000

44. (b); Let C.P. of each mobile is 100 Rs
$\therefore$

	First Mobile		Second Mobile		
CP	100		100	=	200
SP	130	Difference = 50 →	80	← 210 - 130	

$\therefore 50 \rightarrow 2500$
$1 \rightarrow \frac{2500}{50}$
$\therefore 100 \rightarrow \frac{2500}{50} \times 100$
$= 5000\ Rs$

45. (b); Let the original sum = P
Then, $\frac{P\times12\times5}{100} - \frac{P\times8\times5}{100} = 800$
$P = \frac{800 \times 100}{20}$
$P = 4000\ Rs$

46. (e); $x = \pm59$
$y = \pm2\sqrt{5}$
$\therefore$ No relationship can be established.

47. (a); (i)$20x^2 - 67x + 56 = 0$
$20x^2 - 35x - 32x + 56 = 0$
$x = \frac{7}{4}, \frac{8}{5}$
(ii) $56y^2 - 67y + 20 = 0$
$56y^2 - 35y - 32y + 20 = 0$
$y = \frac{4}{7}, \frac{5}{8}$
$\therefore x > y$

48. (d); $x = \pm121$
$y = 121$
$\therefore x \leq y$

49.(b); (i)$x^2 - 13x + 42 = 0$
$X^2 - 6x - 7x + 42 = 0$
$x = 7, 6 \Rightarrow y = 6$
$\therefore x \geq y$

50. (c); (i)$15x^2 - 46x + 35 = 0$
$15x^2 - 25x - 21x + 35 = 0$
$x = 1.66, 1.4$
(ii) $4y^2 - 15y + 14 = 0$
$4y^2 - 7y - 8y + 14 = 0$
$y = 2, 1.75$
$\therefore x < y$

51. (a); Required ratio = $\frac{640 + 240}{760 + 480}$
$= \frac{22}{31}$

52. (b); Required ratio = $\frac{160 + 380 + 760 + 520}{4} = 455$

53. (c); Total no. of graphics novels purchased
$= \frac{20}{100}(520 + 840)$
$= 272$

54. (d); Required increase percent = $\frac{(680-240)\times100}{240}$
$= 183\frac{1}{3}\%$

55. (e); Required % = $\frac{680\times100}{800} = 85\%$

56. (a); Role of interest = $\frac{5940\times100}{3\times16500}$

$r = 12\%$

∴ Required compound interest

$= 16500\left[\left(1+\frac{12}{100}\right)^3 - 1\right]$

= 6681.31 Rs

57. (d); Let length = l

$\therefore breadth = \frac{96}{l}$

$\therefore (l+6)\left(\frac{96}{l}-3\right) = 66$

$96 - 3l + \frac{96\times6}{l} - 18 = 66$

$12 = 3l - \frac{96\times6}{l}$

$l - \frac{192}{l} = 4$

$l^2 - 192 = 4l$

$l^2 - 4l - 192 = 0$

$(l+12)(l-16) = 0$

$\therefore l = 16$ (because $l \neq -12$)

$\therefore perimeter\ of\ square = 4 \times 16 = 64\ m$

58. (b); Suppose initial money did Abhay have = 100 Rs.

Vijay = 30 Rs

his mother = 20 Rs

Vijay's mother left with

$= (1-\frac{5}{8}) \times 20 = 7.5$

$\therefore 7.5 \rightarrow 600$

$1 \rightarrow \frac{600}{7.5}$

$100 \rightarrow \frac{600}{7.5} \times 100$

= 8000 Rs

59. (c); Let Roni's present age = $4x + 4$

Let sonu's present age = $9x + 4$

$\therefore (9x+4) - (4x+4) = 20$

$5x = 20$

$x = 4$

$\therefore Tina's\ age = 20 + 10$

$= 30\ years$

60. (e); Ratio of profits

$= (3500 \times 12) : (2500 \times 12) : (6000) \times 8$

$= 7 : 5 : 8$

$Let\ total\ profit = 20x$

$3x \rightarrow 1977$

$\therefore 20x \rightarrow \frac{1977}{3} \times 20$

$= 659 \times 20$

= 13180 Rs.

61. (b); The pattern of the number series is :

8 + 2 = 10

10 + 8 (= 2 × 3 + 2) = 18

18 + 26 (= 3 × 8 + 2) = 44

44 + 80 (=3 × 26 + 2) = 124

124 + 242 (= 3 × 80 + 2) = 366

62. (d); The pattern of the number series is :

13 + 1 × 12 = 13 + 12 = 25

25 + 3 × 12 = 25 + 36 = 61

61 + 5 × 12 = 61 + 60 = 121

121 + 7 × 12 = 121 + 84 = 205

205 + 9 × 12 = 205 + 108 = 313

63. (a); The pattern of the number series is :

656/2 + 24 = 328 + 24 = 352

252/2 + 24 = 176 + 24 = 200

200/2 + 24 = 100 + 24 = 124

124/2 + 24 = 62 + 24 = 86

86/2 + 24 = 43 + 24 = 67

64. (c); The pattern of the number series is :

454 + 18 = 472

472 - 27 = 445

445 + 18 = 463

463 - 27 = 436

436 + 18 = 454

65. (b); The pattern of the number series is :

12 × 4 - 30 = 48 - 30 = 18

18 × 4 - 36 = 72 - 36 = 36

36 × 4 - 42 = 144 - 42 = 102

102 × 4 - 48 = 408 - 48 = 360

360 × 4 - 54 = 1440 - 54 = 1386

66. (a); ≈ 12

67. (d); $\approx 9945 - 35$

≈ 9900

68. (e); ≈ 15800

69. (c); ≈ 1.5

70.(c); ≈ 102 + 46.8 + 1.

≈ 151

ENGLISH LANGUAGE

71. (b); Refer to the fourth sentence of second paragraph, "The rural distress in such situations often prompts States or the Centre to offer relief — reduction or complete waiver of loans." Hence (b) is the correct option in context of the passage.

72. (d); Refer the fourth paragraph, "Repeated debt-waiver programmes distort households' incentive structures, away from productive investments and towards unproductive consumption and wilful defaults." and "Such measures can erode credit discipline and may make banks wary of lending to farmers in the future." Hence both (a) and (c) are true in context of the passage.

73. (d); Refer to the sixth paragraph, "India needs massive investment in areas such as irrigation, water conservation, better storage facilities," and "The problems in Indian agriculture are structural. They need long-term solutions." Hence both the options (ii) and (iii) are correct.

74. (b); The author in the passage emphasized on the disadvantages of loan waiving scheme to the economy and also he has mentioned the steps that need to be implemented. Hence the title "The hazards of farm loan waivers" is the most appropriate one.

75. (d); Refer to the last paragraph, "Loan waivers will only end up complicating the problem". Hence statement (d) is false in context of the passage.

76. (c); Refer the second last paragraph, "The governments – Centre and states – have repeatedly failed to break the cartelization", and "So, now these corporates are buying produce in farms at cheap rates, keep them in cold stores, repackage them and sell them in malls in cities at thrice the purchase price. Neither the farmer gains nor the consumer." Hence both the statements (i) and (iii) are correct.

77. (d); **Exorbitant** means reasonably high. Hence it has similar meaning to **Outrageous**.

78. (c); **Vagaries** means an unexpected and inexplicable change in a situation or in someone's behavior. Hence it has similar meaning to **Caprice** which means a sudden and unaccountable change of mood or behaviour.
Superfluous means unnecessary.
Profuse means plentiful.

For questions (79-83): the correct sequence is **BCAFED.**

79. (c); **80. (d);** **81. (e);**

82. (d); **83. (c);**

84. (d); Replace 'start' by 'started' as part (c) of the sentence uses '**could have**'. "**Have/has/had**" is followed by V3 form of the verbs. Hence "could **have taken** ..... and **started**..." is the correct usage.

85. (c); Use 'when' in place of 'that' as "**Scarcely/Hardly**" is followed by '**when'** or '**before'** in a correct grammatical usage.

86. (a); Replace 'or' by 'if' as "**seldom if ever**" and '**seldom'** or '**never'** are the correct usage.

87. (b); Use 'by' before 'whom' to make the sentence grammatically correct. Look at these sentences;
I know the man **by whom he was helped**. [Passive]
I know the man **who helped** him. [Active]

88. (e); The given sentence is grammatically correct.

89. (b); Replace 'has' by 'had' as part (a) of the sentence denotes the past event while part (b) signifies past of the past event for which **Past Perfect Tense** should be used.
e.g. **I did not know** [Simple Past] **when he had come** [Past Perfect Tense].

90. (b); Replace 'each and every' by 'each' as '**each'** is used for '**two or more than two**' while '**every'** or '**each and every'** is always used for '**more than two**'.
e.g. There were **two boys** and **each** boy had a red pen.
There were **ten students** in the class room and **each/every/each and every** student had a red pen.

91. (e); There is no error in the given statement.

92. (d); Replace 'sweetly' by 'sweet' as "**taste, feel, seem, appear, look, smell, remain, etc.**" are '**Copula Verbs**' or **Linking Verbs** which take **Adjective** and not Adverb.
e.g. She **tastes sweet** [Adjective].
A rose **smells sweet** [Adjective].
She **looks beautiful** [Adjective].
She **looks suspiciously** [Adverb] at him.

93. (b); **94. (a)** **95. (e);**

96. (c); **97. (d);** **98. (e);**

99. (b); **100. (d);**

REASONING ABILITY

Direction (1-5): Study the following information carefully and answer the questions given below:

Seven persons i.e. P, Q, R, S, T, U, V of different ages i.e. 6, 15, 19, 23, 30, 45, 60 years are sitting in a circular table facing towards center.

Note- No two consecutive letters are in alphabetical order. Person's age must not be a factor or a multiple of sum of the ages of their immediate neighbors.

R sits immediate right of the person whose age is 15. One person sits between T and R (either left or right). One person sits between P and the person whose age is 6 (either left or right). Age of T is twice the age of the person who sits 2nd to the right of T. Difference between the age of the immediate neighbors of V is more than 14. Age of U must not be multiple of 10. Sum of the ages of immediate neighbors of R is 34. Q is younger than P.

1. What is the age of Q?
(a) 15 (b) 60 (c) 23
(d) 6 (e) None of these

2. Who among the following sits 2nd to the left of the person whose age is 19 years?
(a) U (b) V (c) P
(d) Q (e) None of these

3. Which of the following is true?
(a) S's age is 60 years
(b) R is younger than Q
(c) U sits immediate right of P
(d) V's age is 19
(e) None is true

4. What is the position of V with respect to P?
(a) Immediate left
(b) Immediate right
(c) 2nd to the left
(d) 2nd to the right
(e) None of these

5. Who among the following is oldest person?
(a) Q (b) P (c) U
(d) V (e) None of these

Direction (6-8): Study the following information carefully and answer the questions given below:
Books which have different number of pages is shown below with their codes.

Pages	Step I	Step II	Codes
210	42	168	56
60	12	48	16
240	48	192	64
150	30	120	40
180	36	144	48
231	77	154	22
147	49	98	14
273	91	182	26
441	147	294	42
357	119	238	34

If number of pages in different books are 90, 120, 270, 300, 330, 315, 231, 567, 399, 525 then find the codes of these books as per the above-mentioned operations and placed these books in two different stores i.e. A and B. Arrange all codes in ascending order. After arranging the codes, first five codes are placed in store A and last five are placed in store B. Now, answer the given questions-

6. Which of the following page book have highest code in store A?
(a) 315 (b) 120 (c) 399
(d) 525 (e) 567

7. Which of the following pages book is not in store B?
(a) 270 (b) 300 (c) 330
(d) 525 (e) 315

8. What is the difference in the codes of 2nd lowest code in store A and 2nd highest code in store B?
(a) 66 (b) 56 (c) 64
(d) 58 (e) None of these

Direction (9-10): Study the following information carefully and answer the questions given below:

P@Q means P is neither smaller nor equal to Q
P$Q means P is not smaller than Q
P%Q means P is not greater than Q
P*Q means P is neither smaller nor greater than Q
P#Q means P is neither greater nor equal to Q

9. **Statements:** A$B%F#D, Y@M*F
Conclusion I: B#M **II:** A%Y **III:** Y@B
(a) Only I follow
(b) Only II follows
(c) Only III follows
(d) I and III follows
(e) I and II follows

10. **Statements:** M*J%G$B#X@L, S%U$N@M
Conclusion I: S#L **II:** J#U **III:** G@N
(a) Only I follow
(b) Only II follows
(c) Only III follows
(d) I and III follows
(e) I and II follows

Direction (11-13): Study the following information carefully and answer the questions given below:
P@Q means P is married to Q
P#Q means P is parent of Q
P&Q means P is sibling of Q and both are of same gender
P$Q means P is sibling of Q and both are of different gender
P+ means P is male
P* means P is female

11. If J@F*#T$R, V@R+#B&A, F#Q#D is true and D is only niece of T then, how is Q related to B?
(a) Uncle (b) Aunt (c) Sister
(d) Brother (e) Can't be determined

12. If J@F*#T$R, V@R+#B&A, F#Q#D, Q+@W#N is true and D is only niece of T then, how is J related to N?
(a) Grandfather
(b) Grand mother
(c) Grand son
(d) Granddaughter
(e) Can't be determined

13. If J@F*#T$R, V@R+#B&A, F#Q#D, Q+@W#N is true and D is only niece of T then, how many male members are in the family?
(a) Three (b) Four (c) Five
(d) Seven (e) Six

Direction (14-17): Study the following information carefully and answer the questions given below:

Thirteen boxes of different colors are placed one above another in alphabetical order either from bottom or from top. Each box contains different number of toffees which is multiple of 13. Maximum toffees in a box is 169.

There are equal number of boxes are placed above as well as below J. Two boxes are placed between box J and the Pink colored box. Five Boxes are placed between Pink and Yellow colored box. Box which have 13 toffees is placed just below Yellow colored box. Black colored box is placed just above Red colored box and just below the box which have 169 toffees. There are as many boxes are placed above Red colored box as below the box which have 13 toffees. White colored box is placed just above the box which have 65 toffees and just below the box which have 104 toffees. There are as many boxes are placed between the boxes which have 13 and 52 toffees as between the boxes which have 52 and 104 toffees. Two boxes are placed between Blue colored box which doesn't have 13 toffees and Green colored box which is placed just below J.

14. If box F have 13 toffees, then which of the following is Pink colored box?
(a) M
(b) Box which have 52 toffees
(c) G
(d) Box which have 169 toffees
(e) Can't be determined

15. What is the sum of the toffees of Blue and Green colored box?
(a) 273 (b) 156 (c) 117
(d) 65 (e) Can't be determined

16. If M is Yellow colored box and sum of toffees in box O and D is equal to the sum of toffees in box H and L then, what is difference between the toffees of box L and O?
(a) 52 (b) 78 (c) 65
(d) 91 (e) Can't be determined

17. Which of the following colored box have 52 toffees?
(a) Red (b) Pink (c) Blue
(d) Green (e) None of these

18. **Statement:** "The simplest and the most cost effective way to upgrade your home–Exchange your old furniture and get 25% to 33% off on the new furniture".—An advertisement of a furniture company.
Assumptions
I. Now-a-days, there is no demand for furniture products unless some attractive scheme is offered.
II. Some customers always desire to have best quality and do not bother either for cost or for convenience.
III. Some customers want to keep their home up-to-date with reasonable cost and with fewer hassles.
(a) Only I is implicit
(b) Only II is implicit
(c) Only III is implicit
(d) I and II are implicit
(e) None of these

19. **Statement:** The situation of this area still continues to be tense and out of control. People are requested to be in their homes only.
Assumptions
I. There had been some serious incidents.
II. People will not go to the office.
III. Normally will be restored shortly.
(a) Only I is implicit
(b) I and II are implicit
(c) None is implicit
(d) I and III are implicit
(e) All are implicit

20. Statement: Should the consumption of aerated drinks be banned in India?

Arguments:

I. Yes, this is the only way to reduce the risk of exposing people to some diseases.

II. No, each individual should have right to choose what he wants.

III. No, there is no confirmed evidence that such products have adverse effects on human body.

IV. Yes, it is banned in many other countries also.

(a) Only I is strong
(b) I and II are strong
(c) Only III is strong
(d) I and IV are strong
(e) All are strong

Direction (21-23): Study the following information carefully and answer the questions given below:

P@Q means P is East of Q and the distance between P and Q is either 4m or 15m
P#Q means P is West of Q and the distance between P and Q is either 7m or 18m
P&Q means P is North of Q and the distance between P and Q is either 4m or 15m
P%Q means P is South of Q and the distance between P and Q is either 7m or 18m
J&K#L%M, B&N#M, BN<MN<KL, JK>ML

21. What is the direction of K with respect to B?
(a) North-west (b) South-west (c) North-east
(d) South-east (e) Can't be determined

22. If X is 11m West of B then, what is the distance between X and J?
(a) 7m (b) 4m (c) 6m
(d) 10m (e) 11m

23. Four of the following five are alike in certain way and hence form a group, find the one which does not belong to that group?
(a) BM (b) BL (c) NL
(d) KN (e) JM

24. Some alphabets are given below. First arrange them in alphabetical order from left to right then number them I, II, III, IV, V from left to right.
1) J, P, D, B, S
2) C, M, A, Q, X
3) W, I, T, N, O
Arrange all separately in each number. Which of the following is in alphabetical order?
(a) Only I and III
(b) Only II and IV
(c) Only II and III
(d) Only III and IV
(e) Only II, III and IV

Direction (25-29): Study the following information carefully and answer the questions given below:

Eleven seats are placed in a single row in which three seats are vacant. Persons sitting in these seats are facing North. No two vacant seats are placed adjacent to each other. Persons are of different ages. Seats are numbered 1 to 11 from West to East.

Note- Two Persons sitting between P and Q doesn't means that there are only two seats are placed between them. There may be vacant seats between them.

Three persons sit between A and B. Person who is 32 years old sits immediate left of B. D and E are immediate neighbors of A whose seat number is less than 6. B is as many years older than H as younger than D. C sits 3rd to the left of A. One person sits between G and F who is 40 years old. Sum of the age of D and G is 82. H sits immediate left of one of the vacant seats. Age of H is half the age of the person who sits at seat number 11. Persons whose age are 26 and 28 years sit at odd numbered seats. D sits left of the person whose age is 22 years and right of the person whose age is 28 years. No vacant seat is between H and the person whose age is 22 years.

25. Who among the following sits at seat number 8?
(a) No one (b) G (c) B
(d) H (e) None of these

26. How many persons are sitting between the persons whose age are 22 and 35 years?
(a) Four (b) Two (c) Three
(d) Five (e) None of these

27. In which of the following seat the person whose age is 26 years are sitting?
(a) Seat number 3
(b) Seat number 1
(c) Seat number 5
(d) Seat number 7
(e) None of these

28. Which of the following is true regarding C?
(a) C doesn't sit at seat number 1
(b) One of the vacant seats is not adjacent to C
(c) C's age is 22 years
(d) Two persons are sitting between A and C
(e) None is true

29. What is the age of the person who sits 2nd to the left of the person whose age is 26 years?
(a) 28 years (b) 22 years (c) 40 years
(d) 50 years (e) None of these

Direction (30-34): Study the following information carefully and answer the questions given below:

Eight persons are working in three different cities i.e. Delhi, Pune, Hyderabad. At least two persons are working in a city. There are four married couples of two generations. Number of males and females are equal in each city.

Note- Married couples are not working in same city. They have different designations i.e. GM, AGM, CEO, Manager, Assistant Manager, PO, Clerk, Sub staff (these are in decreasing order of seniority means GM is senior most and Sub staff is junior most person).

Only three persons are senior than the only son of B. B doesn't work in Pune. E is sister in law of G who is junior most person. H is son in law of D, who is immediate senior of A. F is spouse of C and both are not working in Delhi. There are as many posts above father in law of A as below sibling of A. Only C and H are working in Hyderabad. Only PO and Sub staff are working in Delhi. Spouse of E is not working in Delhi. G is daughter in law of B who is spouse of D. F is senior than H and junior than C.

30. How many persons are junior than H?
(a) Three (b) Four (c) Two
(d) Five (e) None of these

31. Which of the following combination is true?
(a) B-PO-Delhi
(b) C-CEO-Hyderabad
(c) H-Clerk-Hyderabad
(d) F-AGM-Delhi
(e) None is true

32. Who among the following is Assistant Manager?
(a) B (b) D (c) C
(d) F (e) None of these

33. Which of the following is the designation of father of G?
(a) GM (b) AGM (c) Sub Staff
(d) Manager (e) None of these

34. Who is immediate junior as well as immediate senior of the persons who are working in Delhi?
(a) G (b) F (c) E
(d) D (e) None of these

35. **Statement-** The Blue Whale Challenge is reportedly a suicide game in which the player is given certain tasks to complete over a period of 50 days and the final task leads him or her to commit suicide. Taking a serious view of the Blue Whale Challenge game, the Madras High Court directed the Central and Tamil Nadu governments to explore possibilities of banning it.
(I) The Bengal government is planning to introduce a separate chapter on "Responsible use of Internet," in school syllabus in view of regular reports of school children in the state becoming victims of deadly online game.
(II) The judges suggested to the state DGP and Home Secretary that severe warning be issued to those who shared the 'dangerous' online game with others.
(III) The court stressed on the need for creating awareness among students against playing such "dangerous" online games in educational institutions. The bench also said monitoring should be intensified to prevent further spread of the game through sharing.
(IV) State government will conduct workshops in different schools throughout the state to counsel students on the danger of playing games like Blue Whale either online or through mobile applications.
Which of the following will be the preventive course of action for reducing the impact of suicide game menace?
(a) Only (III) and (IV)
(b) Only (II) and (III)
(c) Only (I) and (II)
(d) All of the above
(e) None of these

36. **Statement-** Brushing off the recent two-month discord with China over Dokalam standoff, India displayed robust participation at the BRICS meeting in the Chinese port city of Xiamen. In their first substantive meeting post the 73-day Dokalam face-off, Prime Minister Narendra Modi and Chinese President Xi Jinping held "constructive" talks during which it was reaffirmed that maintaining peace and tranquillity in the border areas was a pre-requisite for the development of India-China relations.
Which of the following can be inferred from the given statement?
(I) Prime Minister Narendra Modi and Chinese President Xi Jinping held their first substantive bilateral meeting at the BRICS meeting after the Dokalam standoff, which had put ties between the two countries under strain.
(II) Putting behind the Dokalam standoff, India and China today agreed on a "forward-looking" approach in their ties and make more efforts to ensure that such incidents do not recur.
(III) Counter terrorism issues were taken up during the course of BRICS, which were discussed in this meeting between Modi - Xi Jinping.
(a) Only I and II
(b) Only II and III
(c) Only I and III
(d) All of the above
(e) None of the above

37. **Statement-** After the ministerial performance report and a series of meetings with BJP Chief Amit Shah, PM Modi on 5th July made major strategic changes to his Cabinet – 19 new minsters were inducted into the Government, while 5 were sacked. Government sources conceded that with 2019 Lok Sabha polls drawing near, the concern within the government was to ensure last-mile delivery of projects which was also a reason of this expansion.
Which of the following can be hypothesized from the given statement?
(I) The Modi government has received criticism from the Opposition for its failures to meet its promises, particularly on job growth.

(II) This Cabinet reshuffles and expansions can generally be categorised as tactical or strategic.
(III) The makeover of the union cabinet shows the BJP has a clear eye on the coming 2019 Lok Sabha showdown.
(a) Only (I) and (III)
(b) Only (II) and (I)
(c) Only (III) and (II)
(d) Only (II)
(e) None of these

Direction (38-40): Study the following information carefully and answer the questions given below:

Phrase	Step I	Step II	Step III	Step IV
lost all important contacts	tosl lla tmportani sontactc	os5 la2 ti8 ta9	pr# kb@ sj@ sb#	rb# ks@
divert metro work traffic	tiverd oetrm korw craffit	ve7 om4 or5 ct6	uf# pl@ pq# bs@	fq# pb@
order statue received again	rrdeo etatus deceiver ngaia	ro4 at7 ei9 na4	qp@ bs# fj# mb@	qm@ sj#

As per the rules followed in the above steps, find out in each of the following questions the appropriate step for the given phrase.
Phrase- recover that device issue

38. What is the step IV of this phrase?
(a) qf# gj@ (b) qj# bu@ (c) qf# bj@
(d) bj# qf@ (e) None of these

39. What is the 2nd element from left in step III?
(a) qq# (b) gb# (c) qg@
(d) qb# (e) None of these

40. What is the sum of the numbers in 2nd and 4th element from left in step II?
(a) 8 (b) 7 (c) 9
(d) 6 (e) None of these

Directions (41-45): Read the following information carefully and answer the questions given below it.

Eight persons R@, R#, R$, R&, R%, R*, R© and RΩ are sitting around a hollow circular table such that R&, R$, R# and RΩ sit on the inner side of the table and the rest are sitting on the outer side of the circular table and they all are facing away from the center. The persons sitting on the inner side of the circular table are sitting just behind the persons sitting on the outer side of the circular table and all are graduated from different universities i.e. HTS, UGI, LPU, HNB, KPJ, UPI, NIT and FPT. All the information is not necessarily in the same order.

The one who is graduated from KPJ sits just behind the one who sits second to the left of the one who is graduated from UPI. RΩ sits just behind the R*. R% who is graduated from UGI sits opposite to the one who sits at the immediate left of R©. R& is not graduated from FPT. The one who is graduated from HTS sits at the immediate left of the one who is graduated from LPU. The one who is graduated from KPJ sits just behind the R©. RΩ sits at the immediate right of R&. The persons who are graduated from FPT and HNB are sitting on the same table and sit opposite to each other. R& sits just behind the one who is graduated from UGI. R$ is not graduated from FPT.

41. Who among the following is graduated from HTS?
(a) R@ (b) RΩ (c) R&
(d) R# (e) None of these

42. Which among the following statement is not true?
(a) RΩ is graduated from NIT
(b) R$ sits just behind the one who is graduated from LPU
(c) R# is graduated from FPT
(d) R% sits at the outer circular table
(e) All are true

43. How many persons are sitting between R* and R% when counted from right of R*?
(a) One (b) Two (c) None
(d) None of these (e) Can't be determined

44. Four of the following five are alike in a certain way and hence form a group, which of the following does not belong to the group?
(a) R% (b) R© (c) R*
(d) RΩ (e) R@

45. Who among the following is sitting third to the right of the one who is sitting just behind the R©?
(a) The one who is graduated from KPJ
(b) R&
(c) The one who is sitting at the immediate left of R$
(d) RΩ
(e) None of these

QUANTITATIVE APTITUDE

Directions (46-50): Given data is regarding three automatic toys on two types of movements: Neck movements (NM) and Hand rotation (HR). It starts recording from 9 AM onwards on 12 June. Each toy has different battery percentage and battery capacity.

Toy A: Battery Capacity = 1500 units, Battery Percent = 80%
At every 4th NM and 3rd HR together, 1 unit of battery is consumed. Toy A gets completely discharged at 11 AM.

Toy B: Battery Capacity = 2000 units, Battery percent = 75%
NM = 30/min, HR/min = 50% of NM/min of toy A. At every 3rd NM and 2nd HR together, 1 unit of battery is consumed.
Toy C: Battery Capacity = 120% of battery capacity of toy B, Battery Percent = 60%
NM/min = NM/min of toy A + 5, HR = 30/min. at every 3rd NM and 2nd HR together. 1 unit of battery is consumed.

46. If toy B & A had been charged completely (100%), then what would be the difference between time taken by both the toys to get discharged completely?
(a) 50 min (b) 90 min (c) 0 min
(d) 15 min (e) 10 min

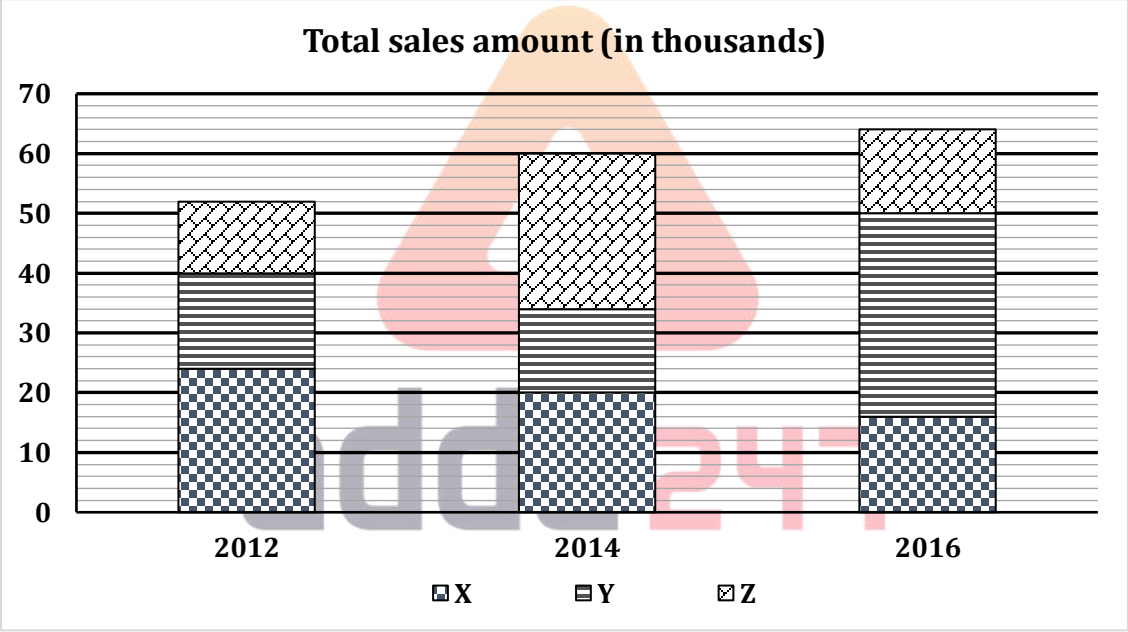
47. What is the difference between total NM and HR of toy C when the battery of toy C gets completely discharged? (consider available battery percent)
(a) 1620 (b) 1440 (c) 1920
(d) 1200 (e) 1280

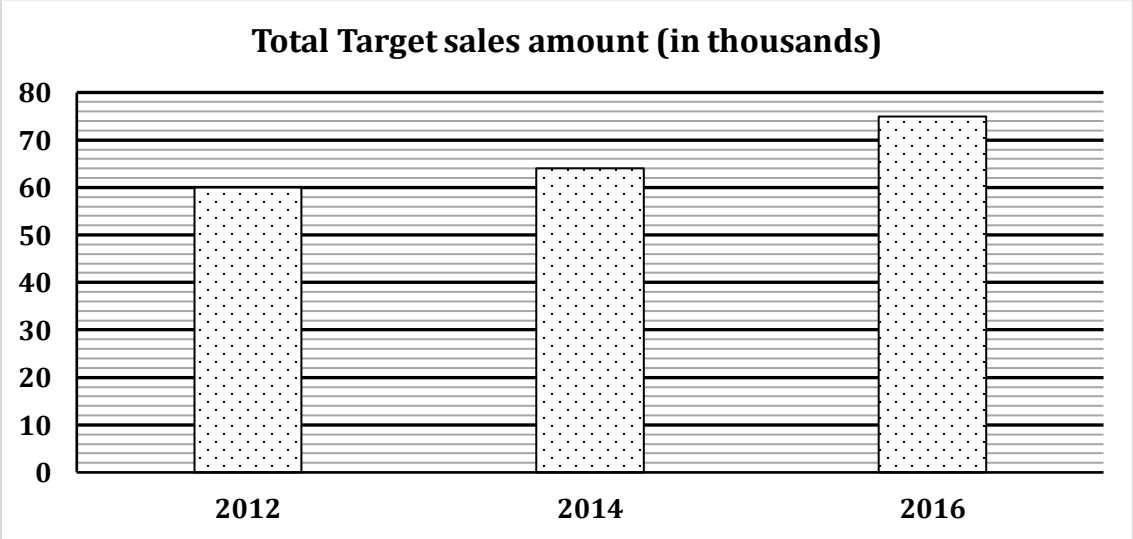
48. If power consumed per NM of toy B is 0.1 unit, then what is power consumed per HR of toy B on that day?
(a) 0.45 unit (b) 0.35 unit (c) 0.15 unit
(d) 0.2 unit (e) 0.8 unit

49. Total number of NM/min of all the three toys together is what percent more than total number of HR/min of all the three toys together?
(a) 63.5% (b) 52.25% (c) 46.5%
(d) 48.25% (e) 43.75%

50. If toy C would be 100% charged then at what time battery of toy C will drain completely?
(a) 11:30 AM (b) 11:45 AM (c) 11:35 AM
(d) 11:40 AM (e) 11:50 AM

Directions (51-55): first bar graph shows total sales amount of three different companies in three different years and second bar graph shows the combined target sales amount of these 3 companies in these 3 years.





51. If sales amount of company X and Y in 2012 increases by 20% and 25% respectively and sales amount of company Z remains constant, then find the difference between total target sales amount of all these companies in 2012 and sales amount of these 3 companies together as per the above condition?(in Rs.)
(a) 800 (b) 8000 (c) 8800
(d) 6000 (e) 3000

52. If the ratio of sales amount of company Y in 2016 to that of in 2018 is 17:15, then find the average of sale amount of company Y in 2014, 2016 and 2018?(in Rs.)
(a) 24000 (b) 25500 (c) 27000
(d) 26000 (e) 26500

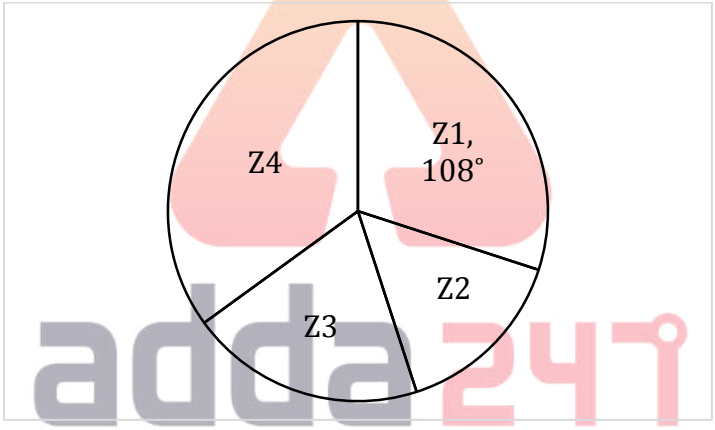
53. If the total target sales amount of all companies together in 2018 is 20% more than that of in 2016 and sales amount of company X and company Y in 2018 increases by 50% and 20% respectively than that of in 2016, then find by what percent sales amount of company Z be increased from 2016 to 2018 just to meet the total target sales amount of all companies together in 2018?
(a) 70% (b) 80% (c) 75%
(d) 50% (e) 90%

54. Sales amount of company Y in 2014 is what percent of total target sales amount of all companies together in 2016?
(a) $11\frac{1}{9}\%$ (b) $14\frac{2}{7}\%$ (c) $18\frac{2}{3}\%$
(d) $8\frac{1}{3}\%$ (e) $16\frac{2}{3}\%$

55. Total sales amount of X in 2012, 2014 and 2016 together is how much more/less than the total sales amount of Z in the same years?(in Rs.)
(a) 11000 (b) 9000 (c) 7000
(d) 10000 (e) 8000

Directions (56-60): Given Pie Chart shows the number of total voters registered from 4 different villages and all registered voters from these four villages cast their votes.

Total Voters = Valid Voters + Invalid Voters



(i) Total number of valid voters in village Z3 is one-third more than the difference of that of from village Z1 & Z2.
(ii) Difference of valid voters from village Z4 and Z2 is 480. Ratio of total voters from village Z2 and that of Z4 is 3 : 7 respectively.
(iii) Total voters in village Z3 are more than that of Z2. Total invalid voters from all the villages together are 20% of total registered voters from all the villages.

56. What is the central angle corresponding to total voters in village Z2?
(a) 72° (b) 54° (c) 60°
(d) 75° (e) 66°

57. If there are 10800 registered voters in village Z2 of which 98% votes were valid. What can be the difference between valid & invalid votes from village Z4? (use information of the above questions).
(a) 960 (b) None of these (c) 4992
(d) Both (b) & (e) (e) 3072

58. What is the central angle corresponding to valid votes from village Z3? (use information of the above questions).
(a) 75° (b) 82° (c)108°
(d) 60° (e) 95°

59. If there were total 4000 invalid voters from village Z2 & Z1 in the ratio of 9 : 11 respectively and 20% of the votes from village Z2 were found invalid then, find the difference between registered voters of Z3 and Z4? (use information of the above questions).
(a) 10000 (b) 9000 (c) 11000
(d) 9500 (e) 10500

60. If valid voters from Z4 are more than that of from Z2 and valid voters from Z2 are 3600. Total valid voters from Z1 & Z4 are 10800. How many valid voters are from Z3?
(a) 5300 (b) 3120 (c) 4160
(d) None of these (e) 4080

Directions (61-65): Given graph shows the number of orders received and cancelled on particular days of a week (From Monday to Saturday) while the table shows the number of orders which were not delivered. Read the data carefully and answer the questions.
(**NOTE:** Refer Y-Axis values as number of orders while X-Axis values as Days i.e. 20 = Monday, 40 = Tuesday and so on)
(Orders continued/booked are those which are not cancelled)
Some data is missing in the given graph.
Orders Booked = Orders Received – Orders Cancelled
Orders Delivered = Orders Booked – Orders not delivered

Number of orders not delivered	
Monday	120
Tuesday	80
Wednesday	160
Thursday	300
Friday	200
Saturday	120

61. what is the difference between number of orders delivered on Monday & Wednesday together and number of orders booked on Wednesday & Thursday together?
(a) 300 (b) 280 (c) 320
(d) 240 (e) 260

62. if orders booked on Tuesday are 50 more than that of Saturday while the sum of orders cancelled on these days is 30 more than orders not delivered on same days then by what percent orders cancelled on Tuesday are more/less than orders cancelled on Friday?
(a) 37.5% (b) 12.5% (c) 11.11%
(d) 18.75% (e) 31.25%

63. if total orders received on last 3 days are 150 more than total orders received on first 3 days and orders delivered on Friday are more than that on Saturday then what can be the difference between orders cancelled on Saturday and orders delivered on Thursday? (Z > 60)
A. 28 B. 49 C. 23 D. 40 E. 17 F. 37
(a) A, C, E (b) A, C, F (c) B, D, F
(d) all of these (e) A, C, D, E, F

64. if orders delivered on Tuesday are $33\frac{1}{3}$% less than orders booked on Thursday while average of orders delivered on Friday & Saturday is 195 and orders booked on Friday are more than orders delivered on Saturday then which of the following is definitely true?
(a) orders cancelled on Tuesday are more than that on Friday.
(b) difference between orders cancelled on Tuesday & Saturday is 322.
(c) orders delivered on Friday are always more than orders received on Wednesday.
(d) difference between orders delivered on Monday & Friday can be 160.
(e) more number of orders were cancelled on Friday than number of orders not delivered on Friday.

65. if ratio of orders received on Thursday & Friday together to orders delivered on Monday, Wednesday & Saturday together is 65 : 34 and orders cancelled on Tuesday are 10% less than that on Wednesday and orders cancelled on Saturday is same as difference between orders not delivered on Friday and orders cancelled on Tuesday then how many total orders were booked in these 6 days together?
(a) 2850 (b) 2450 (c) 2280
(d) None of these (e) 2170

Directions (66-70): Read the data carefully and answer the questions. Some data are missing which you have to calculate as per information provided in the questions.

Position	No. of applications received	No. of duplicate applicants	Average no. of duplicate applications received from duplicate applicants
A	1040	63	4
B	880	--	6
C	600	28	--
D	--	48	--
E	420	--	--

NOTE:- A duplicate applicant is an applicant who has submitted additional (duplicate) application after submitting their original application. All application forms (original + duplicate) received from duplicate applicant were rejected. Remaining all application were accepted. None of the applicants applied for more than one post.

66. For position A, if respective ratio between no. of accepted application from males & that of rejected applications from males is 5 : 3 & respective ratio of no. of accepted applications from females and that of rejected applications from females is 5 : 1 then find rejected applications from males.
(a) 230 (b) 315 (c) 425
(d) 255 (e) 300

67. For position E, no. of accepted applications from males, from females & no. of rejected applications (total) are X, X + Y, X + 2Y respectively. Which of the following is true? (average no. of duplicate applications received from duplicate applicant is non-zero integer)
A. no. of accepted applications from males for E can be 139.
B. no. of accepted applications from males for E can be 141.
C. no. of accepted applications from males for E can be 131.
(a) C (b) A & B (c) A & C
(d) B (e) A

68. If average no. of accepted applications for position A & B is 659. What is the value of rejected applications for position B?
(a) 287 (b) 246 (c) 254
(d) 275 (e) 263

69. For position D, if respective ratio of accepted & rejected applications is 4 : 1. Which of the following can be true? (average number of duplicate applications received for D is a non – zero integer)
A. no. of applications received for D (all original + all duplicate) can be 240.
B. no. of applications accepted for D can be 768.
C. least no. of applications (all original + all duplicate) were received for D is a possibility.
(a) only B & C
(b) none of the option
(c) only C
(d) only A & C
(e) only B

70. for position C, no. of accepted applications from males is between 150 & 200 while that of females is between 130 & 180. Which of the following can be a possible value (s) of average no. of duplicate applications submitted by duplicate applicants for position C?
A. 11 B. 5 C. 9 D. 13 E. 7
(a) B, C & E (b) C & E (c) A & D
(d) B & E (e) A, C & D

Directions (71-72): Given below is no. of male & female students in classes A, B & C. some data are missing which you have to calculate as per instructions provided.

	A	B	C
Boys	50	--	--
Girls	--	80	60

NOTE:
(i) probability of selecting a boy from class A is $\frac{5}{12}$.
(ii) probability of selecting a boy from all the boys of all classes is $\frac{14}{19}$ such that the boy selected is either from class B or class C.
(iii) probability of selecting a boy from class B is equal to probability of selecting a boy from class C.

71. how many boys are in class C?
(a) 60 (b) 50 (c) 70
(d) 80 (e) 90

72. By what percent total students in class B are more than that of in class A?
(a) $16\frac{2}{3}\%$ (b) $37\frac{1}{2}\%$ (c) 25%
(d) $33\frac{1}{3}\%$ (e) None of these

73. Given below is the series in which one number is wrong. Consider this wrong number as the value of A in the second series and find the value of D based on the pattern of first series

1, 3, 6, 21, 88, 445, 2676

(A), (B), (C), (D)

(a) 685 (b) 136 (c) 33
(d) 10 (e) 30

Directions (74-78): Read the following information carefully and answer the questions.

x women can complete a piece of work in 2y days. 1.5x men can complete the same work in y days while 2x children can complete the same work in 3y days. 8 women, 8 children and 8 men together can complete same work in $22\frac{1}{2}$ days. 9 men can complete the same work in (y + 20) days.

74. What is the value of y.

(a) 14 (b) 18 (c) 20
(d) 16 (e) 24

75. If 36 women started the work and after 4 days 30 women are replaced by 8 men then, find the total time in which work will be completed.

(a) $20\frac{4}{25}$ days (b) $22\frac{3}{25}$ days (c) 12 days
(d) 12.5 days (e) $24\frac{4}{25}$ days

76. Find the value of x.

(a) 12 (b) 14 (c) 10
(d) 15 (e) 11

77. When 8 women, 8 children and 8 men work together and completed the work, then what percentage of total work is completed by children.

(a) 16% (b) 10% (c) 15%
(d) 8.33% (e) 12.5%

78. (x – 6) women worked for (y – 6) days and (x – 6) men worked for (y – 10) days then in what time remaining work will be completed by (x – 6) children.

(a) $152\frac{2}{3}$ days (b) $148\frac{1}{3}$ days (c) 145 days
(d) 154 days (e) 158 days

Directions (79-80): Read the following information carefully and answer the questions.

There are some students (male + female) in Class A and Class B in CCA School. In class A, females are 30% of total students of class A. In class B, number of male and female students are equal and male students in class B are thrice the number of female students of Class A.

79. If male students passed in Class A and Class B are in ratio 1:3 respectively and failed male students of class A and Class B are equal, then total male students who got passed from both classes together are what percent of total students of both the classes?

(a) $9\frac{1}{11}\%$ (b) $11\frac{1}{9}\%$ (c) $14\frac{2}{7}\%$
(d) $8\frac{1}{3}\%$ (e) $6\frac{2}{3}\%$

80. If 10% of male students and 20% of female students from Class A left the school and male and female students in class B increased by 25% and 30% respectively, then total male students of Class A and B together are approximately what percent of total students of Class A and B together?

(a) 55.45% (b) 45.45% (c) 55.15%
(d) 45.15% (e) 50%

ENGLISH LANGUAGE

Directions (81-83): Read the following passage and answer the following questions based on the given passage.

The inflation devil is back and at the wrong time. The 7.35% rise in consumer price inflation in December is a shocker even to those who were prepared for an elevated level of inflation in the backdrop of the rise in prices of food commodities in general, and the astronomical rise in the price of onions, in particular. The disturbing December print has set off fears over whether India is entering a period of slow growth accompanied by high inflation, in other words, stagflation. Such fears have to be weighed against a few facts. First, the headline inflation number is driven mainly by food inflation at 14.12% — it was 10.01% in November and -2.65% in December 2018. While onion was the prime villain pushing up price inflation in vegetables to a huge 60.50% compared to December 2018, prices of other food items such as meat and fish (up 9.57%), milk (up 4.22%), eggs (up 8.79%) and some pulses were also on the upswing. These are a largely seasonal rise in prices and are driven mainly by supply-side factors and the prices will reverse once the supply shortfall is addressed. Second, core inflation, which is the one that should be of concern, has only inched up marginally from 3.5% in November to 3.7% in December. That said, it would be worrisome indeed if core inflation were to shoot up or if food inflation does not cool down in the next couple of months.

The sharp jump in the CPI has ***queered the pitch*** for the Reserve Bank of India's monetary policy review in February. The central bank stood pat on rates in the December policy precisely due to fears of inflation and had even revised upwards its inflation projection for the second half of the fiscal to 4.7-5.1%. The December print is

way above the monetary policy committee's (MPC) mandated limit of 6% (4% plus 2%) which means that a rate cut is pretty ***much off the table*** for now. Yet, with growth sagging, there is pressure on the central bank to cut rates at least one more time to stimulate growth. It would be interesting to watch the deliberations of the MPC in February. While the market may be prepared to accept a standstill policy for now, any change in the RBI's stance from accommodative to neutral may not go down well. A lot would also depend on the fiscal arithmetic that would emerge from the budget to be presented on February 1. Meanwhile, the government should engage all levers to address the supply-side issues that are behind the rise in food inflation. A calming down of food prices will help the bank do what the government and markets want — lower rates.

81. Which of the following can be inferred in context of the phrase "***queered the pitch***", as highlighted in the above passage?
(a) With the inflation figures are rising, it has become difficult to address the challenges now faced in setting policy rates to sustain the growth of the Indian economy.
(b) The MPC is expected to announce the consecutive rate cut to boost economic activity amid benign inflation.
(c) both (a) and (d)
(d) Owing to the steady rise of CPI inflation, RBI will have to face the challenge in its upcoming meeting, to decide to whether to cut the policy rates or keep them unchanged.
(e) None of these

82. Which of the following situations can be related with STAGFLATION, as mentioned in above passage?
(a) General decline in the prices of goods and services in an economy, which in turn increase the purchasing power of money.
(b) Rising food prices caused by increased demand for agricultural commodities.
(c) An economy experiencing falling productivity along with workers becoming more inefficient; leading to increased costs and reduced output.
(d) None of these
(e) All of the given situations are correct

83. Which of the following is not true in context of the information given in the above passage?
(a) The increase in core inflation has not been as high as increase in CPI inflation
(b) During the December monetary policy review, RBI had largely left the rates fluctuating.
(c) Addressing the issues that led to inflation in food commodities can marginally reduce the intensity of burden created by the current situation.
(d) both (a) and (b)
(e) All are correct

Directions (84-87): Read the following passage and answer the following questions based on the given passage.

For years, the government of Bhutan has enshrined gross national happiness as its guiding light. Though national leaders had long eschewed traditional economic metrics like gross domestic product in favor of a more subjective understanding of development, in 2008, the country's constitution formally established that ensuring "a good quality of life for the people of Bhutan" would be its primary aim. GNH would be the measure of the country's progress, quantified by a complicated index based on "areas of psychological well being, cultural diversity and resilience, education, health, time use, good governance, community vitality, ecological diversity and resilience and economic living standards"—an array of factors that might all together quantify well-being and happiness. Sperling said, economists and policy makers too often set their sights on certain goals—high GDP and low unemployment—that can disregard how Americans actually feel. To re-center economics in people's lived experiences, Sperling proposed the adoption of a different goal: dignity. Economic dignity would mean being able "to care for your family and enjoy the most meaningful moments of family life, without economic deprivation taking away those most meaningful moments," Sperling said.

By Sperling's criteria, he said, America is failing on all three fronts. Even as the unemployment rate in the United States is hovering near a 50-year low, the country has no universal paid-family-leave requirement to ensure that new parents have time to spend with their infant children or to heal after birth. No law grants employees bereavement leave with which to mourn loved ones and begin to piece their lives back together in their absence. The federal minimum wage falls beneath the poverty line for families of two or more. Officially, about 13 million Americans—and likely more unofficially—have to work multiple jobs to make ends meet. The U.S. also fails to provide adequate support for people who have lost their jobs, Sperling said, and adequate resources with which to find new ones. Students are taking on crippling debt to go to college. In 2017, 12.3 percent of Americans were living in poverty.

Together, Sperling observed, that adds up to millions of Americans living without what he defines as economic dignity: unable to provide a basic quality of life for themselves and the people they love, enduring unfulfilling or downright exploitative work conditions out of a desperate need for money. And with the nation's economic mobility in sharp decline over the past few decades, many workers and their families could remain mired in that state for generations. But Americans can fight for greater economic dignity, Sperling said, arguing that many already are: By unionizing; pushing for a higher minimum wage;

lobbying for better leave, child-care, and health-care policies; and demanding action against workplace sexual misconduct, they're working to claim more of what he put forward as the base necessities for all working people. Policies to promote dignity could take a number of different forms, he said. "But that's the right way to look at it," Sperling said: as an array of options. "Don't make the means the end," he emphasized. ***"Happiness is the end goal***. So try asking why people are unhappy"—and work from there.

84. What is author's view regarding minimum wage policy as a measure of economic stability of country?
(a) None of the given statements is correct
(b) American citizens have achieved a higher economic stability
(c) GNP, as used in Bhutan has been an inefficient and inaccurate way to assess economic stability
(d) With minimum wages policy, Americans enjoy higher access of civil rights
(e) The benefits achieved under GNP regimes are higher than those where governments have introduced minimum wage policy

85. What can be the possible inference drawn from the statement "***Happiness is the end goal***", as highlighted in the above passage?
(a) ensuring universal basic income will promote happiness within countries, which is the primary goal of every country
(b) dignity should not be framed as a metric to fulfill happiness
(c) author has considered happiness as the highest priority and countries must find means to achieve it for overall development
(d) the GDP a country must be given due attention to achieve the overall happiness of the citizens
(e) none is correct

86. What have been the measures suggested by Sperling to achieve economic dignity?
(a) giving due attention to health and child care facilities within a country
(b) assurance of provision of basic necessities
(c) higher amount of minimum wages must be ascertained
(d) both (a) and (b)
(e) all of the above

87. The author is in line with
(a) Economists believe that GDP and higher per capita income is necessary for economic growth
(b) Gross National Happiness and quality of life are necessary aims for any economy
(c) Although GNH is premised on the idea of overall psychological well-being, the significance of governance is undermined
(d) The developed nations have been successfully providing support for the unemployed but are still lagging in GNH
(e) All are correct

Directions (88-91): Read the following passage and answer the following questions based on the given passage.

Conversations about the role of flexible working have shifted. It's no longer enough for companies to offer employees the option to either work from home or the office. Employees want to work from anywhere. Companies that want to attract and retain top talent, and ensure teams are highly productive, need to adapt their culture and technology to accommodate this shift in attitudes. And this is where the IT department can solidify its role as a valued contributor to the success of a company, by implementing technologies that enable secure and remote collaboration.

According to a recently commissioned Polycom survey, 24,000 respondents across 12 countries indicate that nearly two-thirds of today's global workforce take advantage of the anywhere working model. This is a significant shift since May of 2012 when only 14% of employees benefited from remote working.

The survey results also provide insights into some of the concerns among companies in moving forward with the anywhere working model. Two significant concerns are a lack of trust and the perception that employees are not working as hard when they are not in the office. Also, among the 45-60-year-old age group, 59% worry that working anywhere will cause them to work longer hours. The fear of being always connected to work and overworking is a significant deterrent for this age group.

A good first step for companies to overcome the trust and perception concern is to ensure workers are measured by output and not by the hours they have worked, commonly referred to as '***presenteeism***.'
Countries like Brazil _____ here with 80% of employees adopting the anywhere working model, and 64% respondents use video to communicate several times a day. When respondents were asked how their companies could improve trust and perceptions with the anywhere working model, the most popular recommendations were to: Equip workers with technology that is easy to use and which connects them to their colleagues; Ensure the same policies are applied to everyone in the business, regardless of seniority or their situation; and Provide guidelines on how to manage working from anywhere.

91% of those surveyed agreed that technology is a key factor in improving relationships and fostering better teamwork. This suggests that investing in the right technologies, in particular video **collaboration**, to get the most out of individuals and teams can help solve the lack of trust and perception concerns. And this is where the IT department can become a difference maker as they can enact technologies, such as video conferencing, to ensure colleagues can seamlessly collaborate wherever they are.

88. Which of the following can be considered true in context of the information available in the given passage?
(a) most of the employers feel that the employees do not provide optimum output when working away from their office locations
(b) emphasis has been laid on the growing preference for remote working
(c) provision of user friendly technological ways of communication helps employers build better relations with employees preferring anywhere working model
(d) the It department of any country has a large role to play when it comes to efficient functioning of changing models of working preference
(e) all are correct

89. Which of the following statement can be inferred by author's view of not giving too much importance to "***presenteeism***"?
(a) Highly paid jobs can be highly pressurised too, demanding unhealthy amounts of overtime.
(b) Business should be using output numbers to set an average instead of calculating the time spent working by each employee
(c) When it comes to work, we should value the returns instead of time apportioned by employees towards their workplace.
(d) Both (b) and (c)
(e) none of these

90. Which of the following phrases could fit in the given blank, to make the statement contextually and grammatically meaningful?
(a) are all and sundry
(b) have a cup of Joe
(c) go back to the drawing board
(d) lead the pack
(e) all are correct

91. Which of the following is opposite to **COLLABORATION**, as highlighted in the given passage?
(a) unraveled (b) cognizant (c) confrontation
(d) denunciation (e) none of these

92. In the given question, three statements have been given which are then divided in four parts. Following the statements are options which mention the part of statements which contains grammatical error. Mark the option mentioning the incorrect part of the statement(s).
[I] The most striking thing on the JMI wall is (A)/ the national flag, hundreds of which are (B)/ strung together in such a way that the (C)/ tricolour runs parallel with the road. (D)
[II] It is disturbing that assassination (A)/ is no longer universally (B)/condemned by all, as it was (C)/until the last decade or two. (D)
[III] While, Gurdwara Bangla Sahib (A)/ is known by all, there are (B)/ other Sikh shrines too that (C)/ tell interesting and inspiring stories. (D)
(a) III-A (b) I-C; II-C (c) II-C; III-B
(d) I-C; II-B; III-C (e) II-D; III-D

Directions (93-95): In the following questions two columns are given containing three sentences/phrases each. In first column, sentences/phrases are A, B and C and in the second column the sentences/phrases are D, E and F. A sentence/phrase from the first column may or may not connect with another sentence/phrase from the second column to make a grammatically and contextually correct sentence. Each question has five options, four of which display the sequence(s) in which the sentences/phrases can be joined to form a grammatically and contextually correct sentence. If none of the options given forms a correct sentence after combination, mark (e), i.e. "None of these" as your answer.

93. **COLUMN I**
(A) If organizations or states do not learn from one another,
(B) Wide collaboration means including everyone
(C) The more we talk about the importance of cybersecurity
COLUMN II
(D) generations of cybersecurity professionals we very much need
(E) the same attacks will needlessly take down countless entities
(F) repositories that are part of our operational systems
(a) C-D & B-F (b) A-E (c) B-D
(d) C-F & A-E (e) None of these

94. **COLUMN I**
(A) Only one museum currently has the funding to contend for
(B) Speculators, thieves, and promoters long ago created
(C) Ethical appeals notwithstanding, great
COLUMN II
(D) transfer will disseminate once static fortunes
(E) art will increasingly devolve into big business
(F) and fed a market where cultural icons could be traded like commodities
(a) B-F & C-D (b) C-E & A-F (c) B-E & A-D
(d) C-E & B-F (e) None of these

95. **COLUMN I**
(A) A lack of meaningful GDPR enforcement by
(B) Neither companies nor CMPs seem keen on
(C) The results of our empirical survey

COLUMN II

(D) shoring up that pathetic 12 percent compliance rate
(E) regulators had already been fairly well established
(F) stop data collection, or misled the end user

(a) A-E & B-D (b) A-E & B-F (c) C-F & A-D
(d) B-E & C-D (e) None of these

Direction (96-100): Given below are few sentences where parts of the sentence have been jumbled. Rearrange the parts sentences in the proper sequence to form a meaningful statement and then answer the questions given below.

[I] Confessions of a Shopaholic sold three (A) / million copies and was even (B) / turned into a Hollywood blockbuster (C)/ published in 2000, the novel (D)

[II] in production and disposal of unsold stock(A)/ and their just-in-time manufacturing at the expense (B)/ take fast fashion – the wear-it-once culture of high-street brands (C)/of low labour costs leads to untold waste (D)

[III] about the impact of their choices (A)/ on the environment and on societies (B)/ even the most extravagant consumers (C)/ have become more discerning (D)

[IV] only two decades later, the obsession (A)/ core of the story, feels terribly outdated (B)/ luxury items, which was at the (C)/ with treating oneself by buying (D)

[V] perhaps it is because (A)/ today's youth has grown (B)/ up with an abundance (C)/ of (often cheap) products (D)

96. What will be the correct sequence of rearrangement of parts of the statement [I]?
(a) ACBD (b) CADB (c) DABC
(d) BACD (e) No rearrangement is possible

97. What will be the correct sequence of rearrangement of parts of the statement [II]?
(a) BCDA (b) CBDA (c) ACBD
(d) DCAB (e) No rearrangement is possible

98. When the statements given above are rearranged, which of the following statement will not be coherent with the theme of the passage?
(a) III (b) V (c) II
(d) I (e) All are coherent

99. What will be the correct sequence of rearrangement of parts of the statement [III]?
(a) DABC (b) BDCA (c) CDAB
(d) ABCD (e) No rearrangement is possible

100. What will be the correct sequence of rearrangement of parts of the statement [IV]?
(a) ADCB (b) BACD (c) CDBA
(d) DABC (e) No rearrangement is possible

Directions (101-106): In the sentences given below, four words have been highlighted and placed in a sentence. Identify the correct sequence of the words in the sentence. Also, one of the given words will need to be replaced. Identify the correct sequence and the correct replacement and mark that option as your answer.

101. Governments and (A) **contagion** institutions can set targets and (B) **multilateral** for other parties to change their (C) **sustainably** and use their resources both efficiently and (D) **behaviour**.
(a) BDAC; C- sufficiently
(b) DCBA; D- hyphenated
(c) BACD; A- mandate
(d) CADB; A- tenets
(e) No interchange required

102. Specifically, (A) **harshest** in technology enable solar panels to work even in the (B) **generate** conditions, such as in (C) **innovations** hot climes, and can even (D) **eternity** power in damp weather.
(a) DABC; A- harangued
(b) BCDA; all words are correct
(c) CBDA; B- genre
(d) CADB; D- extremely
(e) No interchange required

103. The "Clean Up Mekong" (A) **realistic** in Viet Nam is an example of how cross-sector (B) **collaboration** helps provide (C) **solutions** and actionable (D) **champagne** to climate change.
(a) BADC; A- virtual
(b) CDBA; B- condolence
(c) DBAC; D- campaign
(d) DCBA; B- corroboration
(e) No interchange required

104. When (A) **engaged** lead, and when their entire workforces are (B) **mindset**, the public's (C)**livid**, behaviour and (D) **companies** can also change.
(a) CADB; B- miniscule
(b) BADC; C- livelihood
(c) DABC; C- lifestyles
(d) CDAB; D- cognates
(e) No interchange required

105. Partnerships between governments, the private sector, (A) **civil** institutions and (B) **essential** society will be (C) **targets** to ensure we meet the UN Sustainable Development Goals (D) **multilateral**.
(a) BDCA; C- torment
(b) DCAB; B- efficacy
(c) CDAB; A- civilian
(d) DABC; all words are correct
(e) No interchange required

106. Companies can provide (A) **technologies** to make solutions more (B) **accessible** and affordable to all - especially MNCs (C) **operating** across multiple business sectors and (D) **industries**.
(a) BDAC; C- occupational
(b) DCBA; D- industrious
(c) BACD; A- technocracy
(d) CADB; A- compelling
(e) No interchange required

Directions (107-108): Read the following passage and answer the following questions based on the given passage.

Mr. A. Rangaswami Iyangar B.A. B.L., Editor, "Swadesa Mitran" writes: — The unique sequence of events which have been crowded into the past fortnight in the history of India can hardly be ignored by any thinking Indian and it may be useful to take just a ____(I)____ with a view to indicate the immediate work that looms before Indian Nationalists. That the Indian National Congress Session of the year forms one of the greatest landmarks in the political history of the country can admit of no doubt. Although the moderates have re-christened their insignificant gathering by the ___(II)__ name of the National Liberal Federation, it is evident that under the guidance of the new-born, though lukewarm, political enthusiasm of Sir. P.S. Sivaswami Iyer and the out of date political oratory of Babu Surendra Nath Banerjea, it is hardly likely to carry the country along the path of national progress with anything like the fire of the genuine national movement that animates the whole country.

107. Which of the phrases could fit in the blank (I), to make the statement grammatically correct and contextually meaningful?
(a) roughly form the entities of modern-day
(b) merely on territorial extent of its sovereignty
(c) cursory survey of them
(d) religious intermingling to new level of exploration
(e) none of these

108. Which of the following words could fit in the blank (II) to make the statement grammatically correct and contextually meaningful? Also, the same word must fit in the statements given below.
(A) I don't think anyone could read this behaviour in any other way than being _____ and patronising.
(B) In their statements, they have become expert in using _____ phrases and key buzzwords to cover up ugly banalities.
(a) subsume (b) ligature (c) mooted
(d) pompous (e) none of these

Directions (109-110): Read the following passage and answer the following questions based on the given passage.

The United States plans to put a space workshop into orbit in 1972, the Space Agency announced here [Houston] yesterday. The National Aeronautics and Space Administration (NASA) said the third stage of the giant Saturn 5 rocket used to send Apollo spaceships to the moon would be used to house the orbiting laboratory and observatory. The project will study man's physiological and psychological responses in the space environment and provide more detailed information on his capabilities for extended manned flight. The workshop is to be fitted out on the ground and will be launched into a 220 nautical mile circular earth orbit. It will be occupied by a crew of three astronauts who will follow in a smaller rocket about a day later. At first, the astronaut-scientists will spend about 26 days in the orbiting workshop, but later visits lasting up to 56 days are planned. The laboratory will be built into a **modified** S-IVB third stage of the Saturn 5 rocket. The S-IVB is used as the Saturn 1B's second stage.

109. Which of the following statements is not true in context of the information given in the passage?
(a) The astronaut scientists will be spending fortnight in the workshop in the orbit.
(b) Saturn 5 rocket had been used prior to its current requirement for housing laboratory and observatory
(c) The plan proposed by NASA will conduct an in depth study of physiological and psychological reaction of humans within space environment.
(d) both (a) and (b)
(e) all are correct

110. Which of the following is similar to MODIFIED, as highlighted in the passage given above?
(a) immutable (b) incertitude (c) voracious
(d) overhaul (e) none of these

Directions (111-115): In the following questions, a sentence is given which is divided into few parts. The sentence may or may not be grammatically or contextually correct. To make the sentence correct, interchange the positions of the phrase and mark the correct interchange as your answer. If no interchange is required, mark (e) i.e., "no interchange required" as your correct answer.

111. The small savings scheme, (A)/ investment avenues in India (B)/ is arguably one of the most popular(C)/ which offers guaranteed returns along with tax benefit(D)
(a) A-C (b) B-D (c) A-D
(d) A-D, B-C (e) No interchange required

112. Such as stress in balance sheets, (A)/ deteriorating financial conditions of the group (B)/ the agencies did not alter ratings despite (C)/ lack of cash flows, inability to monetise assets (D)
(a) A-C (b) B-D (c) A-D
(d) A-D, B-C (e) No interchange required

113. have benefited from rate reductions (A)/ restaurants and under-construction properties (B)/ from the pre-GST era, only a few services such as (C)/though taxes on goods have come down(D)
(a) A-C (b) B-D (c) A-D
(d) A-D, B-C (e) No interchange required

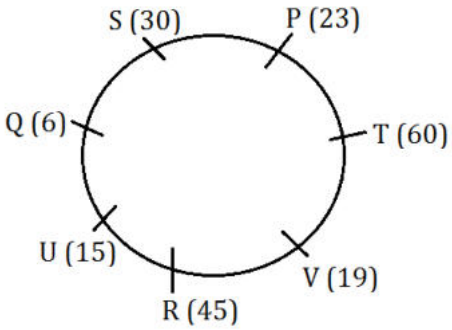
114. The railway is incurring losses (A)/ in the passenger segment as the fare is subsidized, (B)/ while its ends up cross-subsidizing (C)/ passengers by overcharging freight.(D)
(a) A-C (b) B-D (c) A-D
(d) A-D, B-C (e) No interchange required

115. five-day schedule and breaks (A)/ for lunch and tea, might seem an anachronism (B)/ in this universe of instant (C)/ gratification, Test cricket with its (D)
(a) (B)-(D)
(b) (A)- (B)
(c) (A)-(C); (B)-(D)
(d) (A)-(D); (B)-(C)
(e) None of these

Solutions

REASONING ABILITY

Solutions (1-5):



1. (d); 2. (a); 3. (d);

4. (c); 5. (e);

Solutions (6-8):

Pages	Step I	Step II	Codes
90	18	72	24
120	24	96	32
270	54	216	72
300	60	240	80
330	66	264	88
315	105	210	30
231	77	154	22
567	189	378	54
399	133	266	38
525	175	350	50

Codes in ascending order- 22, 24, 30, 32, 38, 50, 54, 72, 80, 88
Books in store A-

Pages	Codes
231	22
90	24
315	30
120	32
399	38

Books in store B-

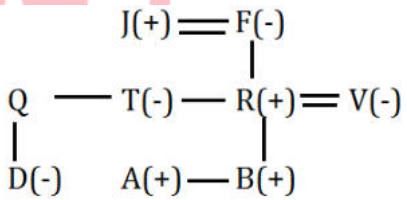
Pages	Codes
525	50
567	54
270	72
300	80
330	88

6. (c); 7. (e); 8. (b);

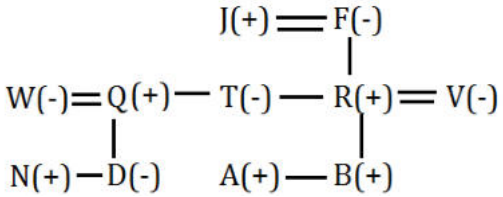
9. (c); I: B#M (False) **II:** A%Y (False) **III:** Y@B (True)

10. (b); I: S#L(False) **II:** J#U(True) **III:** G@N (False)

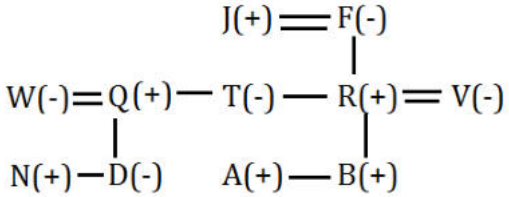
11. (e);



12. (a);



13. (e);



14. (a);

Box	Color	Toffees
P		169
O	Black	
N	Red	
M	Pink	
L	Blue	104
K	White	
J		65
I	Green	52
H		
G	Yellow	
F		13
E		
D		

15. (b);

Box	Color	Toffees
		169
	Black	
	Red	
	Pink	
	Blue	104
	White	
J		65
	Green	52
	Yellow	
		13

16. (c);

Box	Color	Toffees
D		169
E	Black	
F	Red	
G	Pink	
H	Blue	104
I	White	
J		65
K	Green	52
L		
M	Yellow	
N		13
O		
P		

17. (d);

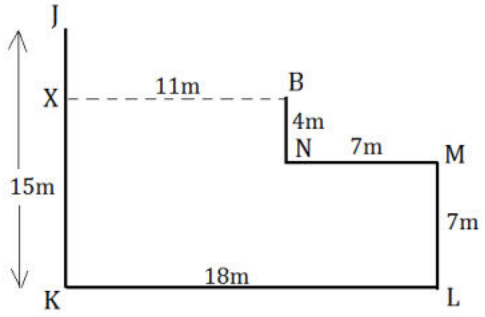
Box	Color	Toffees
		169
	Black	
	Red	
	Pink	
	Blue	104
	White	
J		65
	Green	52
	Yellow	
		13

18. (c); The exchange offer on furniture does not mean that there is no demand for furniture products. So, Assumption I is not implicit. The given advertisement is 'simplest' and 'cost effective', so Assumption II is also not implicit. Assumption III is implicit because some customers want to keep their home upto-date with reasonable cost and with less hassles and that is why that advertisement was given.

19. (b); From the statement, it is clear that there had been some serious incidents in that area, so the situation become tense and out of control. If people remain in their home, then they cannot go to their offices. So, Assumption I and II are implicit. It cannot be said that when it will be normal. So, Assumption III is not implicit.

20. (c); Argument I is not strong due to the word 'only'. There is some law which stop an individual to do wrong acts which he wants. So, Argument II is not strong. Argument III is strong because there is no confirmed evidence that such products have adverse effects on human body. What other countries are doing. We should not follow that blindly. So, Argument IV is not strong.

Solutions (21-23):



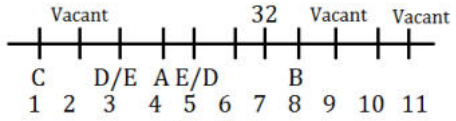
21. (b); 22. (b); 23. (d);

24. (d);

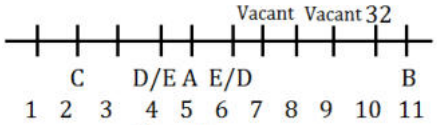
	I	II	III	IV	V
1)	B	D	**J**	**P**	S
2)	A	C	**M**	**Q**	X
3)	I	N	**O**	**T**	W

Solutions (25-29): Three persons sit between A and B. Person who is 32 years old sits immediate left of B. D and E are immediate neighbors of A whose seat number is less than 6. C sits 3rd to the left of A. No two vacant seats are placed adjacent to each other. Here, we get six possibilities i.e. Case 1, Case 2, Case 3, Case 4, Case 5 and Case 6.

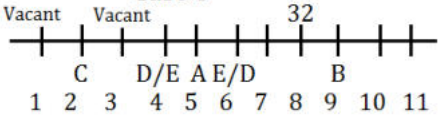
Case 1



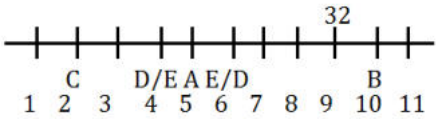
Case 3



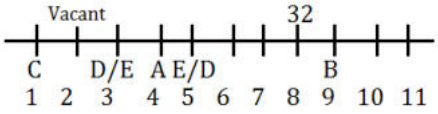
Case 5



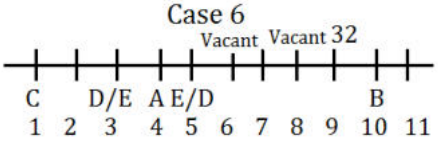
Case 2



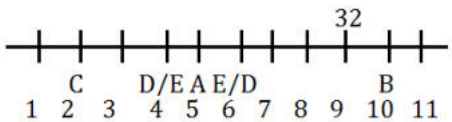
Case 4



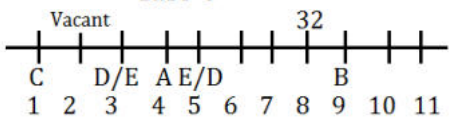
Case 6



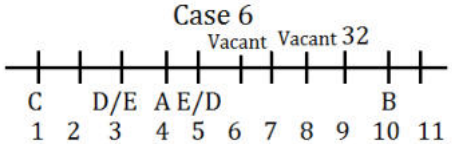
Case 2



Case 4

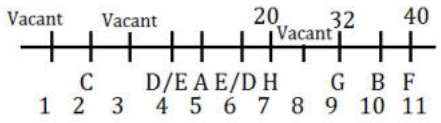


Case 6

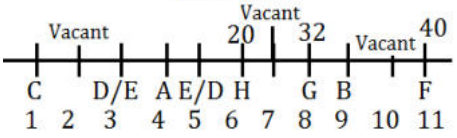


H sits immediate left of one of the vacant seats. One person sits between G and F who is 40 years old. Here, Case 1, Case 3 and Case 5 are ruled out. Age of H is half the age of the person who sits at seat number 11.

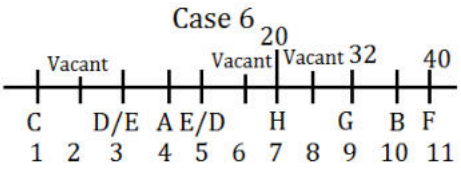
Case 2



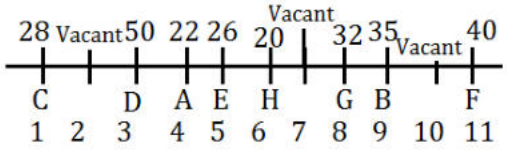
Case 4



Case 6



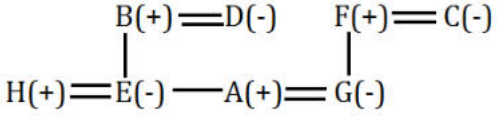
Sum of the age of D and G is 82. Do, D's age will be 50. B is as many years older than H as younger than D. So, B's age will be 35. Persons whose age are 26 and 28 years sit at odd numbered seats. Here, Case 2 is ruled out. D sits left of the person whose age is 22 years and right of the person whose age is 28 years. No vacant seat is between H and the person whose age is 22 years. Here, Case 6 is ruled out.
So, the final arrangement will be: -



25. (b); 26. (c); 27. (c);
28. (e); 29. (d);

Solutions (30-34):

Designation	Person	City
GM	C	Hyderabad
AGM	F	Pune
CEO	D	Pune
Manager	A	Pune
Assistant Manager	H	Hyderabad
PO	B	Delhi
Clerk	E	Pune
Sub Staff	G	Delhi



30. (a); 31. (a); 32. (e);
33. (b); 34. (c);

35. (d); **For I-** This course of action should be taken as a measure to prevent the students from becoming victims of deadly online game as by introducing a separate chapter on "Responsible use of Internet," in school syllabus students may get to know about the proper use of internet.
For II- This is also a preventive course of action as by issuing warning against sharing of game will stop further spreading of this deadly game.
For III- This is also a preventive course of action as an awareness programme against playing such "dangerous" online games is an essential step that should be taken to prevent further spread of the game through sharing.
For IV- The conduction of the workshop by the state government in different schools to counsel students on the danger of playing games like Blue Whale will also be a preventive course of action as a measure to prevent the students from this deadly game.

36. (a); Inference is something which can be drawn from the facts stated in the statement.
For I- This statement can be inferred from the given statement because it is mentioned in the given statement that it is their first substantive meeting post the 73-day Dokalam face-off. Prime Minister Narendra Modi and Chinese President Xi Jinping held "constructive" talks.
For II- This statement can also be inferred from the given statement as it describes that India and China today agreed on a "forward-looking" approach which is also mentioned in the given statement that both Modi and Xi agreed on maintaining peace and tranquillity in the border areas was a pre-requisite for the development of India-China relations.
For III- This statement cannot be inferred from the given statement as it is nowhere mentioned in the given statement that issue of counter terrorism is discussed in the meeting or not.

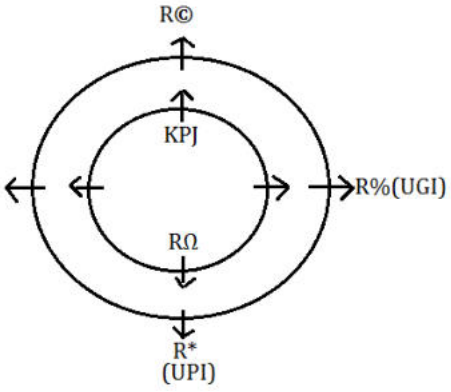
37. (c); **For I-** This statement cannot be hypothesized from the given statement as it is nowhere mentioned that the opposition has criticized Modi government over its promises, particularly on job growth.
For II- This statement can be hypothesized from the given statement as this reshuffles and expansions can be categorized as calculative or a strategic step as it is clearly mentioned in the given statement that 2019 Lok Sabha polls drawing near, the concern within the government was to ensure last-mile delivery of projects.
For III- This statement can be hypothesized from the given statement as the agenda behind this reshuffle will be coming 2019 Lok Sabha showdown which is also mentioned in the given statement that 2019 Lok Sabha polls drawing near, the concern within the government was to ensure last-mile delivery of projects.

Solutions (38-40):
Logic-
Step I- Only first and last letter of each word have been interchanged.
Step II- For words having even numbered letters- middle two letters are picked and add 1 in the number of letters.
For words having odd numbered letters- Both extreme letters are picked and subtracts 1 in in the number of letters.
Step III- Replace odd number by # and even number by @. Replace vowel by next letter and consonant by previous letter.
Step IV- Pick second letter from left from the letters having # and first letter from left from the letters having @.

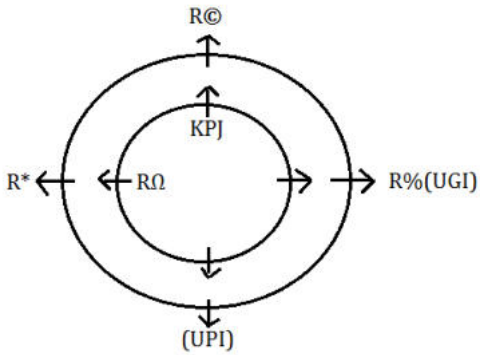
Phrase	Step I	Step II	Step III	Step IV
recover that device issue	recover that eevicd essui	rr6 ha5 vi7 ei4	qq@ gb# uj# fj@	bj# qf@

38. (d); **39. (b);** **40. (c);**

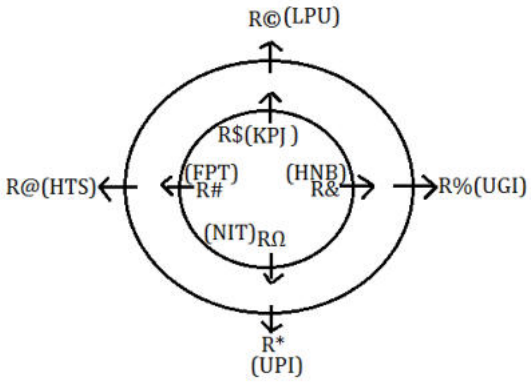
Solutions (41-45): From the given statements, R% who is graduated from UGI sits opposite to the one who sits at the immediate left of R©. RΩ sits just behind the R*. So, we have two possible cases i.e. case1 and case2. The one who is graduated from KPJ sits just behind the R©. The one who is graduated from KPJ sits just behind the one who sits second to the left of the one who is graduated from UPI.
CASE 1



CASE 2



RΩ sits at the immediate right of R&. R& sits just behind the one who is graduated from UGI. So, case 2 gets eliminated here. The persons who are graduated from FPT and HNB are sitting on the same table and sit opposite to each other which means these persons are sitting on the inner table. R& is not graduated from FPT. The one who is graduated from HTS sits at the immediate left of the one who is graduated from LPU which means R@ is graduated from HTS, R© is graduated from LPU and RΩ is graduated from NIT. R$ is not graduated from FPT which means R$ is graduated from KPJ and R# from FPT. So, the final arrangement is:



41. (a); 42. (e); 43. (b);
44. (d); 45. (c);

QUANTITATIVE APTITUDE

Solutions (46-50):
TOY A:
Battery available = 1200 units
Battery in operation = 11:00 – 9:00 = 2 hrs = 120 min
4NM + 3HR = 1 unit
4800 NM + 3600 HR = 1200 unit ...(i)
To find per minute NM & HR, divide (i) by the time for which battery remained in operation
40 NM/min + 30 HR/min = 10 unit/min
NM (A) = 40 per min
HR (A) = 30 per min
TOY B:
NM (B) = 30 per min
HR (B) = 20 per min
3NM + 2HR = 1 unit
Battery available = 1500 units
4500 NM + 3000 HR = 1500 unit
Since we know per min HR & NM, dividing total HR by HR/min we can find time for which battery remains operational
Battery in operation = 150 min = 2.5 hrs
TOY C:
NM (C) = 45 per min
HR (C) = 30 per min
Battery capacity = 2400 units
Battery available = 1440 units
3NM + 2HR = 1 unit
4320 NM + 2880 HR = 1440 unit
Since we know per min HR & NM, dividing total HR by HR/min we can find time for which battery remains operational
Battery in operation = 96 min = 1 hr 36 min

	Total Battery (units)	Available Battery (units)	NM (per min)	HR (per min)	Battery Operational Time (hrs)
A	1500	1200	40	30	2 (120 min)
B	2000	1500	30	20	2.5 (150 min)
C	2400	1440	45	30	1.6 (96 min)

46. (a); TOY A
4NM + 3HR = 1 unit
6000 NM + 4500 HR = 1500 units
For operational time, divide total NM by per min NM
Time = $\frac{6000}{40}$ = 150 min
TOY B
3NM + 2HR = 1 unit
6000 NM + 4000 HR = 2000 units
For operational time, divide total NM by per min NM
Time = $\frac{6000}{30}$ = 200 min
Required time difference = 200 – 150 = 50 min

47. (b); total NM = 45 × 96 = 4320
Total HR = 30 × 96 = 2880
Required difference = 4320 – 2880 = 1440

48. (b); 3NM + 2HR = 1 unit
3 × 0.1 + 2HR = 1
HR = 0.35 unit

49. (e); total NM/min = 40 + 30 + 45 = 115
Total HR/min = 30 + 20 + 30 = 80
Required % = $\frac{115-80}{80} \times 100 = 43.75\%$

50. (d); 3NM + 2HR = 1 unit
7200 NM + 4800 HR = 2400 unit
For operational time, divide total NM by per min NM
Time = $\frac{7200}{45} = 160$ min or 2hr 40 min
Required time = 9:00 + 2:40 = 11:40 AM

51. (a); Increased sales amount of company X in 2012
= 24000 $\times \frac{120}{100} =$ Rs. 28800
Increased sales amount of company Y in 2012
= 16000 $\times \frac{125}{100} =$ Rs. 20000
Sales amount of company Z in 2012= Rs. 12000
Total sales amount of company X,Y and Z together in 2012=28800 + 20000 + 12000
= Rs. 60800
Total target sales amount of all the companies in 2012 = Rs. 60000
Required difference = 60800 – 60000 = Rs. 800

52. (d); Sales amount of company Y in 2018
= $\frac{15}{17} \times 34000 = 30000$ Rs.
Required Average = $\frac{14000+34000+30000}{3}$ =26000Rs.

53. (b); Sales amount of company X in 2018
= 16000 $\times \frac{150}{100} =$ Rs. 24000
Sales amount of company Y in 2018
= 34000 $\times \frac{120}{100} =$ Rs. 40800
Total target sales amount of all the companies together in 2018=75000 $\times \frac{120}{100} =$ Rs. 90000
Sales amount of company Z in 2018 to meet the total target sales= 90000−24000 − 40800
= 25200 Rs.
Sales amount of company Z in 2016= 14000 Rs.
Required % = $\frac{25200-14000}{14000} \times 100 = 80\%$

54. (c); Required % = $\frac{14000}{75000} \times 100 = \frac{56}{3}\% = 18\frac{2}{3}\%$

55. (e); Total sales amount of X in 2012,2014 and 2016 together= 24000+20000+16000 = 60000 Rs.
Total sales amount of Z in 2012,2014 and 2016 together= 12000+26000+14000 = 52000 Rs.
Required difference = 60000 – 52000 = 8000 Rs.

56. (b); let total voters from village Z2 & Z4 is 3x° & 7x° respectively
Total voters from village Z3 = (252° - 10x°)
ATQ, 252° - 10x° > 3x°
Check using options
Only at 54°, above equations satisfies
Z2 (registered voters) = 54°
Z3 (registered voters) = 72°
Z4 (registered voters) = 126°

57. (e); ATQ, 54° = 10800
Valid votes in Z2 = $\frac{98}{100} \times 10800 = 10584$
Z4 = 126° = 25200
Since valid votes in Z4 can either be 480 more or less than that of from Z2
Valid votes from Z4 = 480 + 10584 = 11064
Valid votes from Z4 = 10584 – 480 = 10104
Invalid votes from Z4 = 25200 – 11064 = 14136
Or, 25200 – 10104 = 15096
Total registered voters = 360° = 72000
Total invalid votes = 20% of total registered votes = 14400
Since invalid votes from Z4 should be less than total invalid votes
So, valid votes Z4 = 11064
Invalid votes from Z4 = 14136
Required difference = 14136 – 11064 = 3072

58. (d); total voters from Z3 = 72°
Central angle corresponding to valid votes of Z3 ≤ central angle corresponding to total voters of Z3
Only satisfying value = 60°

59. (b); invalid voters from Z1 = 2200
Invalid voters from Z2 = 1800
Total registered voters from Z2
= $\frac{100}{20} \times 1800 = 9000$
54°= 9000
Required difference= $\frac{126}{54} \times 9000 - \frac{72}{54} \times 9000$
= 21000 – 12000 = 9000

60. (c); let valid voters from Z1 be a
Valid voters from Z4 are more than that of Z2
So, valid voters from Z4 = 480 + 3600 = 4080
a + 4080 = 10800
a = 6720
valid voters from Z3 = $\frac{4}{3}(6720 - 3600) = 4160$

Solutions (61-65): Using data given, we get
Orders continued (booked) = Orders Received – Orders Cancelled
Orders delivered = Orders Booked – Orders not Delivered

Days	Orders Received	Orders Booked	Orders Cancelled	Orders Delivered	Orders Not Delivered
Monday	600	400	200	280	120
Tuesday	400	400 – Y	Y (let)	320 – Y	80
Wednesday	500	300	200	140	160
Thursday	600	360	240	60	300
Friday	X (let)	X – 80	80	X – 280	200
Saturday	400	400 – Z	Z (let)	280 – Z	120

61. (d); required difference = (300 + 360) - (280 + 140)
= 240

62. (b); ATQ, 400 – Y = 50 + 400 – Z
Z – Y = 50 .....(i)
Y + Z = 30 + 80 + 120
Y + Z = 230 .....(ii)
From (i) & (ii), Z = 140, Y = 90
Required % = $\frac{(90-80)}{80} \times 100 = 12.5\%$

63. (a); ATQ, 600 + X + 400 = 150 + 600 + 400 + 500
X = 650
X – 280 > 280 – Z
Z < 90
Required difference = Z – 60
Since Z < 90 so required difference should be less than 30 (90 – 60)

64. (d); ATQ, 320 – Y = $\frac{2}{3} \times 360$
Y = 80
X – 280 + 280 – Z = 390
X – Z = 390 .....(i)
So, X > Z
X – 80 > 280 – Z
X > 360 – Z ....(ii)
From (i) & (ii), Z + 390 > 360 – Z
Z < 15 or $0 \leq Z \leq 14$
So, $390 \leq X \leq 404$
(a) Y > 80 not true
(b) Y – Z = 322 or Z – Y = 322
Z = 402 not true
(c) X – 280 > 500 not true
(d) 280 – (X – 280) = 160
X = 400 true
(e) 80 > 200 not true

65. (c); ATQ, $\frac{600+X}{280+140+280-Z} = \frac{65}{34}$
$\frac{600+X}{700-Z} = \frac{65}{34}$ .....(i)
$Y = \frac{90}{100} \times 200 = 180$
Z = 200 – Y = 20
Now putting value of Z in (i)
$\frac{600+X}{680} = \frac{65}{34}$
On solving, X = 700
Total orders booked = 400 + 400 – Y + 300 + 360 + X – 80 + 400 – Z = 2280

Solutions (66-70):
All applicants who submitted more than one application, their original submission is also rejected.
FOR POSITION A:
63 applications were declared duplicate since these 63 applicants submitted more than one application
Total rejected applications = $63 + 63 \times 4 = 315$
Following the same, we get

Position	Total Applications	Original (accepted) Applications	Rejected Applications
A	1040	725	315
B	880	880 – 7p	7p
C	600	600–28(q +1)	28(q + 1)
D	s	s – 48(r + 1)	48(r + 1)
E	420	420 – t(u + 1)	t(u + 1)

Where, p = no. of duplicate applicants for B
q = average no. of duplicate applications from duplicate applicants for C
r = average no. of duplicate applications from duplicate applicants for D
s = total no. of applications received for D
t = no. of duplicate applicants for E
u = average no. of duplicate applications from duplicate applicants for E

66. (d); let accepted & rejected application from males is 5x & 3x respectively
Let accepted & rejected application from females is 5y & y respectively
5x + 5y = 725 .....(i)
3x + y = 315 .....(ii)
Equating (i) & (ii)
x = 85
required no. of rejected applications from males = 3x = 255

67. (c); ATQ, 420 – t(u + 1) = X + X + Y .....(i)
t(u + 1) = X + 2Y .....(ii)
using (i) & (ii)
420 = 3 (X + Y)
X + Y = 140 .....(iii)
A. X = 139
This means, Y = 1
Since no relation regarding value of Y is given so, this is possible.
Given condition is true.
B. X = 141
Using (iii), X at most can be 140
This condition is not possible
C. X = 131
This means, Y = 9
Since no relation regarding value of Y is given so, this is possible.
Given condition is true.

68. (a); ATQ, 725 + 880 – 7p = 659 × 2
Solving, p = 41
Required rejected applications = 7p = 287

69. (e); ATQ, $\frac{s-48(r+1)}{48(r+1)} = \frac{4}{1}$
s = 240 (r + 1) .....(i)
A. Given s = 240
This is possible only when r = 0 but we know r > 0 (average no. of duplicate applications from duplicate applicants cannot be zero since there are applications which were declared duplicate)
This condition is not true.
B. Given s – 48(r + 1) = 768
From (i), 240(r + 1) – 48(r + 1) = 768
192 (r + 1) = 768 ⇒ r = 3
this condition is true.
C. least no. of applications were received for D is a possibility. This is true only if s < 420 (since 420 applications were received for E)
240 (r + 1) < 420
r + 1 < 1.75 ⇒ r < 0.75
this is not possible as we know r can only be non – zero integer
so, this condition is not true.

70. (b); let no. of accepted applications from males & females for C be x & y respectively
ATQ,
150 < x < 200
And, 130 < y < 180
To find, q = ?
Applications accepted from all (males + females) for C = 600 – 28(q + 1)
600 – 28(q + 1) = x + y .....(i)
Minimum possible value of 'x + y' = 151 + 131 = 282
Maximum possible value of 'x + y' = 199 + 179 = 378
So, 282 ≤ x + y ≤ 378 .....(ii)
Using (i) & (ii)
282 ≤ 600 – 28(q + 1) ≤ 378
On solving above inequality,
222 ≤ 28 (q + 1) ≤ 318
$\frac{97}{14} \le q \le \frac{145}{14}$
Satisfying values of q = 7, 9

Solutions (71-72):
Let there are x girls in class A
$\frac{50}{50+x} = \frac{5}{12}$
x = 70 (girls in class A)
let there are y & z boys in class B & C respectively
$\frac{y+z}{50+y+z} = \frac{14}{19}$
y + z = 140 .....(i)
$\frac{y}{y+80} = \frac{z}{z+60}$
yz + 60y = yz + 80z
y : z = 4 : 3 .....(ii)
using (i) & (ii)
y = 80, z = 60

	A	B	C
Boys	50	80	60
Girls	70	80	60

71. (a); Boys in class C = 60

72. (d); total students in class B = 80 + 80 = 160
Total student in class A = 50 + 70 = 120
Required % = $\frac{160-120}{120} \times 100 = 33\frac{1}{3}\%$

73. (c); The given pattern is
×1+1 ×2+2 ×3+3 ×4+4 ×5+5 ×6+6
So, wrong number =3
The new series will be
B = 3× 1 + 1 = 4
C = 4× 2 + 2 = 10
D = 10× 3 + 3 = 33

Solutions (74-78):
Let one woman, one man and one children can complete w, m and c units of work in one day
From question
xw × 2y = 1.5mx × y = 2xc × 3y
2w = 1.5m = 6c
Let 2w = 1.5m = 6c = k
So,
w : m : c = 3 : 4 : 1 or 3a : 4a : a (let)
Total work = $\frac{45}{2} \times 8(1w + 1m + 1c)$
$= \frac{45}{2} \times 8 \times 8a$ = 1440 a units
According to question
9m × (y + 20) = 1440a
9 × 4 a (y + 20) = 1440 a
y = 20
So, x × w × 2y = 1440 a
x × 3 a × 2 × 20 = 1440 a
x = 12

74. (c); y = 20

75. (e); work completed by 36 women in 4 days
= 36 × 3 a × 4 = 432 a units
After 4 days
Remaining work = 1008 a units
Now in one day work completed by 6 women and 8 men = 32 a + 18 a = 50 a units
Required time = $\left(\frac{1008a}{50a} + 4\right)$ days = $24\frac{4}{25}$ days

76. (a); Value of x = 12

77. (e); Required percentage = $\frac{a}{8a} \times 100 = 12.5\%$

78. (e); Total work completed
= 6 × 3 a × 14 + 6 × 4 a × 10
= 252 a + 240 a = 492 a units
Remaining work = 1440 a units – 492 a units
= 948 a units
Required time = $\frac{948a}{6a}$ days ⇒ 158 days

Solutions (79-80): Let total students in class A be 100x.

	Male	Female
Class A	70x	30x;
Class B	90x	90x

79. (c); Let male students got passed in class A be y.
Male students passed in class B = 3y.
ATQ,
$70x - y = 90x - 3y \Rightarrow 2y = 20x$
$\frac{y}{x} = \frac{10}{1} \Rightarrow y = 10x$
Required % = $\frac{4y}{280x} \times 100 = \frac{4\times10x}{280x} \times 100$
$= \frac{100}{7}\% = 14\frac{2}{7}\%$

80. (a); Male students in class A = $\frac{90}{100} \times 70x = 63x$
Female students in class A = $\frac{80}{100} \times 30x = 24x$
Male students in class B = $\frac{125}{100} \times 90x = 112.5x$
Female students in class B = $\frac{130}{100} \times 90x = 117x$
Required % = $\frac{(63x+112.5x)}{(63x+24x+112.5x+117x)} \times 100$
$= \frac{175.5x}{316.5x} \times 100$
= 55.45% (approx.)

ENGLISH LANGUAGE

81. (c); If someone or something queers your pitch, they make it very difficult for you to achieve what you are trying to do. To gather the hint of the situation, refer to the second paragraph, which mentions, "Yet, with growth sagging, there is pressure on the central bank to cut rates at least one more time to stimulate growth. It would be interesting to watch the deliberations of the MPC in February." Referring to the quoted text, we can infer that the statement given in options (a) and (d) are correct in context of the given phrase. Hence, option (c) is the most suitable answer choice.

82. (c); To validate the answer, refer to the first paragraph of the passage given above, which mentions, "The disturbing December print has set off fears over whether India is entering a period of slow growth accompanied by high inflation, in other words, stagflation." Referring to the quoted text, we can clearly infer that the situation mentioned in the option (c) is an example of stagflation. Hence, option (c) is the most suitable answer choice.

83. (b); To validate the answer, refer to the second paragraph, which mentions, "The central bank stood pat on rates in the December policy precisely due to fears of inflation and had even revised upwards its inflation projection for the second half of the fiscal to 4.7-5.1%." Referring to the quoted text, we can infer that the statement given in option (b) is incorrect. Hence, option (b) is the most suitable answer choice.
Stood Pat- To oppose or resist change

84. (a); As per the information given in the passage above, none of the mentioned statements are correct. Hence, option (a) is the most suitable answer choice.

85. (c); From the various parts of the passage given above, we can infer that the statement given in option (c) is suitable in context of the given question. Hence, option (c) is the most appropriate answer choice.

86. (e); To validate the answer, refer to the last paragraph of the passage given above, which mentions, "But Americans can fight for greater economic dignity, Sperling said, arguing that many already are: By unionizing; pushing for a higher minimum wage; lobbying for better leave, child-care, and health-care policies; and demanding action against workplace sexual misconduct, they're working to claim more of what he put forward as the base necessities for all working people." Referring to the quoted text, we can infer that all the given statements are correct in context of the given question. Hence, option (e) is the most suitable answer choice.

87. (b); As per the information given in the passage, we can infer that the statement given in option (b) is in line with the author's viewpoint. Hence, option (b) is the most suitable answer choice.

88. (e); As per the information available in the above passage, all the given statements are correct. Hence, option (e) is the most suitable answer choice.

89. (c); In the second passage, presenteeism has been defined as the 'number of hours one spends at workplace'. From the statement '', we can infer that author has given value to output instead of staying for longer duration at work. Hence, option (c) is the most suitable answer choice among the given statements.

90. (d); Among the given options '**lead the pack**', which means '', is the most suitable phrase which could make the statement grammatically correct as well as contextually meaningful. Hence, option (d) is the most suitable answer choice.
A cup of Joe is an American nickname for a cup of coffee.
All and sundry: Everything without distinction

91. (c); Among the given words, '**confrontation**' which means 'a hostile or argumentative situation or meeting between opposing parties' is opposite of '**collaboration'**. Hence, option (c) is the most suitable answer choice.

92. (c); Among the given statements, statement **[I]** is grammatically correct. In the other two statements, the errors are-
[II] The error lies in the part (C), where 'condemned by all' will be replaced with 'condemned' because of the presence of 'universally'. Adding 'by all' after 'universally' will make the statement superfluous.
[III] The error lies in part (B), where "known by" must be replaced with "known to".
Hence, option (c) is the most suitable answer choice.

93. (b); Among the given phrases, only A-E can be successfully connected to make a contextually meaningful and grammatically correct statement. The statement thus formed will be:
"If organizations or states do not learn from one another, the same attacks will needlessly take down countless entities."

94. (d); Here, the phrases given in (B) and (F) connect well to form a grammatically correct and contextually meaningful statement. Similar is the case with (C) and (E). The statements thus formed will be:
"Speculators, thieves, and promoters long ago created and fed a market where cultural icons could be traded like commodities."
"Ethical appeals notwithstanding, great art will increasingly devolve into big business."

95. (a); Here, the phrases given in (B) and (D) connect well to form a grammatically correct and contextually meaningful statement. Similar is the case with (A) and (E). The statements thus formed will be:
(i) A lack of meaningful GDPR enforcement by regulators had already been fairly well established.
(ii) Neither companies nor CMPs seem keen on shoring up that pathetic 12 percent compliance rate.

96. (c); The correct sequence of the phrases of the statement [I] to make the statement grammatically correct and contextually meaningful will be **DABC**. The statement thus formed will be:
"Published in 2000, the novel Confessions of a Shopaholic sold three million copies and was even turned into a Hollywood blockbuster."

97. (b); The correct sequence of the phrases of the statement [II] to make the statement grammatically correct and contextually meaningful will be **CBDA**. The statement thus formed will be:
"Take fast fashion – the wear-it-once culture of high-street brands and their just-in-time manufacturing at the expense of low labour costs leads to untold waste in production and disposal of unsold stock."

98. (e); Although all the statements are in a jumbled sequence, they are all centered around the similar theme being 'conscious consumers'. Here the introductory statement will be [I], which is an independent statement and find its connection in statement [IV]. Further the next statements will be in sequence of [III], [II] and [V]. Hence, option (e) is the most suitable answer choice.

99. (c); The correct sequence of the phrases of the statement [III] to make the statement grammatically correct and contextually meaningful will be **CDAB**. The statement thus formed will be:
"Even the most extravagant consumers have become more discerning about the impact of their choices on the environment and on societies."

100. (a); The correct sequence of the phrases of the statement [IV] to make the statement grammatically correct and contextually meaningful will be **ADCB**. The statement thus formed will be:
"Only two decades later, the obsession with treating oneself by buying luxury items, which was at the core of the story, feels terribly outdated."

101. (c); For the highlighted words, the correct arrangement will be **BACD**. Also, "**contagion**" must be replaced with "**mandate**" to make the statement grammatically and contextually correct. Hence, option (c) is the most suitable answer choice.

102. (d); For the highlighted words, the correct arrangement will be **CADB**. Also, "**eternity**" must be replaced with "**extremely**" to make the statement grammatically and contextually correct. Hence, option (d) is the most suitable answer choice.

103. (c); For the highlighted words, the correct arrangement will be **DBAC**. Also, "**champagne**" must be replaced with "**campaign**" to make the statement grammatically and contextually correct. Hence, option (c) is the most suitable answer choice.

104. (c); For the highlighted words, the correct arrangement will be **DABC**. Also, "**livid**" must be replaced with "**lifestyles**" to make the statement grammatically and contextually correct. Hence, option (c) is the most suitable answer choice.

105. (d); Among the given highlighted words, the correct rearrangement will be DABC, which will make the statement contextually meaningful and grammatically correct. Also, all the given words are correct and do not require improvement. Hence, option (d) is the most suitable answer choice.

106. (e); Among the given highlighted words, all of them have been correctly placed and are correct in context of the given statement. Therefore, none of them needs to be replaced. Hence, option (e) is the most suitable answer choice.

107. (c); Among the given phrases, the most suitable phrase to fill in the given blank will be "". No other phrase could make the statement both grammatically correct and contextually meaningful. Hence, option (c) is the most suitable answer choice.

108. (d); Among the given words, '**pompous'** which means 'affectedly grand, solemn, or self-important' is the most suitable word to fill in all the three blanks. Hence, option (d) is the most suitable answer choice.

109. (a); Refer to the statement "At first, the astronaut-scientists will spend about 26 days in the orbiting workshop, but later visits lasting up to 56 days are planned." From the quoted text, we can infer that the statement given in option (a) is incorrect in context of the information given in the paragraph.

110. (d); Among the given words, 'overhaul' which means 'analyse and improve (a system)' is synonymous with 'modified'. Hence, option (d) is the most suitable answer choice.
Immutable: unchanging over time or unable to be changed.
Incertitude: a state of uncertainty or hesitation.
Voracious: wanting or devouring great quantities of food.

111. (b); The correct interchange to make the sentence grammatically and contextually correct is B-D. It is to be noted that part (B) mentions a reflexive pronoun "which" that is precisely used to illustrate the details of the subject "the small savings scheme" mentioned in part (A). Hence, the correct interchange would be B-D, thus, option (b) becomes the correct answer choice.

112. (a); The correct interchange to make the sentence grammatically and contextually correct is A-C. The correct subject that a sentence would require is given in Part (C). Hence, by interchanging the positions of A-C, the sentence would be:
The agencies did not alter ratings despite deteriorating financial conditions of the group such as stress in balance sheets, lack of cash flows, inability to monetise assets. Thus, option (a) is the correct answer choice.

113. (d); To make the sentence grammatically correct and contextually meaningful, we must interchange the phrases A-D and B-C. The meaningful sentence thus formed is Though taxes on goods have come down from the pre-GST era, only a few services such as restaurants and under-construction properties have benefited from rate reductions. Hence, option (d) is the correct answer choice.

114. (e); All the phrases of the given sentence are in correct order and do not require any interchange. Thus, option (e) becomes the most viable answer choice.

115. (c); Among the given phrases, (A)-(C) and (B)-(D) must be interchanged to make a grammatically correct and contextually meaningful statement. The correct statement thus formed will be:
"In this universe of instant gratification, Test cricket with its five-day schedule and breaks for lunch and tea, might seem an anachronism."

REASONING ABILITY

Directions (1-3): Study the given information and answer the questions:

When a number arrangement machine is given an input line of numbers, it arranges them following a particular rule. The following is an illustration of an input and its rearrangement.

Input-	65	18	41	53	72	34	89	26
Step1-	195	36	123	159	144	68	267	52
Step2-	159	159	36	303	76	335	215	
Step3-	45	45	18	0	42	45	10	
Step4-	22.5	22.5	9	0	21	22.5	5	

Step IV, is the last step of the above arrangement as the intended arrangement is obtained.
As per the rules followed in the given steps find out the appropriate steps for the given input:

Input: 25 22 93 56 17 74 39

1. What is the sum of the numbers at both the ends in step III of the given arrangement?
(a) 36 (b) 63 (c) 60
(d) 123 (e) None of the above

2. Which element is 2nd to the right of the one which is 4th to the left element in step I?
(a) 112 (b) 44 (c) 148
(d) 75 (e) None of these

3. What is the products of the numbers which is 3rd from the right end and 3rd from the left end in final step of the given arrangement?
(a) 189 (b) 72 (c) 13.5
(d) 180 (e) No such step

Directions (4-8): Study the information carefully and answer the questions given below.

Six people Tarun, charu, Visakha, Monika, Anko and Viraj are born in different years with the current base is taken as 2018. None of them is older than 90 years old. They like different fruits apple, Orange, Grapes, Cherry, Mango, Banana.

Note- The last two digits or reverse of the last two digits of the year in which a person is born can be the age of some other person. (Like A is born in 1943 and age of B is denoted by the last two digits of the birth year of A. Then B's age will be either 34 or 43).

Tarun was born in the year 1983. The difference of age between Tarun and Charu is 21 years. Visakha age is sum of the digits of the year in which Charu was born. The one who likes mango is 5 years elder to Visakha. Anko age is either the last two digits or reverse of the last two digits of the year in which the person who likes mango was born. Only one person is elder to Anko and Visakha likes apple. The one likes cherry is just younger to Anko. The difference between Viraj's and the one who likes cherry is 24 years. The one who likes banana was born in an even year. The one who likes orange is younger to the one who likes grapes both in odd number of years. Monika is younger than Viraj.

4. Who among the following likes Banana?
(a) Anko (b) Tarun (c) Charu
(d) Visakha (e) none of these

5. Who among the following is the eldest?
(a) Anko (b) Tarun (c) Charu
(d) Vishakha (e) none of these

6. Which of the following combination is true?
(a) Anko- 1959-mango (b) Viraj- 1983- apple
(c) Charu-1962-cherry (d) Monika-1995- grapes
(e) none of these

7. Which of the following statement is correct?
(a) Anko is three years older than the one who likes cherry
(b) Viraj is the eldest
(c) Anko born in 1959
(d) Monika is born before Visakha
(e) All are correct

8. In which of the following year Monika was born?
(a) 1995 (b) 2000 (c) 2012
(d) 2007 (e) None of these

Directions (9-10): Study the information carefully and answer the questions given below

Six persons sits around a triangular table such that three of them sit at the corners and the rest on the middle of the side. The one who sits at the corner face away from the center and the one who sit at the middle of the side face towards the center. They also like different animals i.e. fish, dog, rabbit, pigeon, duck and cat. The one who likes fish sits at the corner. The one who likes cat sits immediate right to the one who likes duck. C sits 2nd right to B, who likes rabbit. D faces the center and sits 3rd right to the one

who likes pigeon. E sits immediate right to D. F sits at one of the corner but does not like pigeon and cat. A is one of the person. E does not like Duck and Fish.

9. Who among the following likes ducks?
(a) E (b) F (c) C
(d) B (e) none of these

10. Who among the following sits 2nd to the right of the one who is 3rd left of A?
(a) E (b) F (c) C
(d) B (e) none of these

Directions (11): Study the following information carefully and answer the question given below:

A certain number of persons sit in a row adjacent to each other. Some of them like different fruits and others like different flowers. Six persons sit between the one who like mango and the one who like apple. The one who likes rose sit third to the left of the one who likes apple. Two persons sit between the one who likes rose and the one who likes marigold, who is not a neighbor of the one who likes mango. Only one person sit to the right of the one who likes marigold. No one sit to the right of the one who likes mango.

Note: The one who likes fruits faces South and the one who likes flowers face North.

11. How many persons sit in the row?
(a) Fifteen (b) Seventeen (c) Thirteen
(d) Eighteen (e) Eleven

Direction (12); Study the following information carefully and answer the question given below:

Five persons A, G, K, L and S purchase some items one after other. Two persons bought between A and the one who bought Chair. G purchase immediately before K but none of them bought Chair. Three persons bought between the one who purchase chair and the one who purchase table. Only two persons bought between the one who purchase wallet and the one who purchase table. Bag is purchased immediately before perfume. Only two persons bought between L and the one who purchase perfume. K does not buy wallet.

12. Who among the following purchase table?
(a) L (b) K (c) G
(d) S (e) A

Directions (13-15): Study the following information carefully and answer the questions given below:
$ F 3 6 N @ 9 K T Q 5 C % 8 B # 7 D S * H 4 W L

STEP I- The numbers which are immediately preceded by symbol and immediately followed by an alphabet are arranged in the end of the series in increasing order. (Arranged immediate after L)

STEP II- The odd numbers which are immediately preceded by an alphabet interchange their position with respect to the alphabet just before it.

STEP III-The alphabets which are immediately followed by a symbol are arranged in alphabetical order between H and 4 of step II.

Note: (STEP II is applied after STEP I and STEP III is applied after STEP II)

13. What is the sum of number which is sixth from right end in step I and eight from left end in step III?
(a) 8 (b) 7 (c) 9
(d) 11 (e) 13

14. How many alphabets are immediately preceded and immediately followed by numbers in step II?
(a) one (b) two (c) three
(d) four (e) five

15. How many symbols are immediately preceded by alphabets in Step III ?
(a) one (b) two (c) three
(d) four (e) five

Directions (16-20): Study the information carefully and answer the questions given below.

There are three floors in a given building such that floor 2 is above floor 1 and floor 3 is above floor 2. In the building there are two flats in each floor such Flat A is in the west of Flat B. In the building each Flat has an area of 576 ft and each flat has some certain number of room and no two flat has same number of rooms. The area of each rooms of one of the flat on the even number floor is 64ft. Total rooms on floor number third is seven. The flat which has rooms of area of 72 ft is on odd number floor. Area of each rooms in the flat which is exactly below 9 rooms flat is 288 ft. There is only one floor between the flat who's each room area is 192 ft and the flat whose rooms area is 72 ft. There is no flat on the west of the flat having 6 rooms.

16. What is the area of a room in Flat A on floor 2?
(a) 94 (b) 92 (c) 96
(d) either (a) or (c) (e) None of these

17. What is the total number of rooms on floor 2nd?
(a) 12 (b) 14 (c) 13
(d) 15 (e) None of these

18. Which of the following statement is true?
(a) Total number of rooms on floor 2 is 14
(b) Area of each room is 94 ft of flat A on floor 1
(c) Total rooms in Flat A of all three floors is 17.
(d) All are correct
(e) None is correct

19. What is the area of room of flat B on floor 3rd?
(a) 144 ft (b) 140.5 (c) 138.5
(d) 142 (e) None of these

20. How many rooms are there of the west of the flat whose each room area is 288 ft?
(a) 6 (b) 4 (c) 3
(d) 8 (e) None of these

21. Statement- The Indian Council of Medical Research issued a warning two years ago, based on studies conducted in hospitals that resistance to antibiotics was found in 50% of patients. A large number of infants were dying due to infections that did not respond to treatment.
Courses of action-
I. The revision of antibiotics classes by the World Health Organisation in its list of essential medicines is a welcome step in the global initiative to push back against antimicrobial resistance, the phenomenon of bacteria becoming resistant even to the most potent drugs.
II. **Close scrutiny** of these by national stewardship programmes such as those initiated by the ICMR is needed.
Which of the following will be the course of action?
(a)Only I (b)Both I and II (c)Either I or II
(d)Only II (e)None of these

22. Statement- India is buying over 1,000 new planes. However unprecedented expansion will place immense pressure on the aviation system. The industry currently appears to be underestimating the challenges ahead.
Which of the following could be the reason for the concerns about "challenges ahead" in the above statement?
(i) The buying frenzy, led by budget airlines like SpiceJet and IndiGo, is not without reason. Around 220 million Indians flew last year -- an annual increase of 20%.
(ii) The country is on track to overtake the U.K. as the world's third-largest aviation market by 2026.
(iii) Only 75 out of 400 airports are currently operational in India and even the biggest hubs like Mumbai, New Delhi and Chennai are bursting at the seams.
(a) Only (I) (b) Both (i) and (ii)
(c) Only (iii) (d) Both (ii) and (iii)
(e) None of these.

23. Statement- More than 9 million high-school students across China are taking the biggest exam of their lives known as the gaokao, this week. For millions of teenagers, it's a big source of stress. For many businesses, it's a great chance to make money.
Which of the following statements/facts substantiates the importance of this test for Chinese poeple?
(I) The grueling test determines where the students can go to university and what they'll study.
(ii) Parents are willing to loosen the purse strings to try to ensure success, splashing out on private tutors, good luck charms and even luxury hotels.
(iii) Chinese students have also begun spending more on drugs and dietary supplements that they believe will improve their memory and attention.
(a) Only (I) (b) Both (i) and (ii)
(c) Only (iii) (d) Both (ii) and (iii)
(e) All (i), (ii) and (iii)

Directions (24-27): Study the following information carefully and answer the questions given below.
Given some information:

A@ means the one who earns double amount than A sits 2nd to the right of A.

A# means the one who earns 800 more than A sits immediate left of A.

A% means one who earns 480 less than A sits 4th to the left of A.

A& means the difference between the earning of A and the one who sits 3rd to the left of A is greater than 2000.

There are eight friends i.e. P, B, C, D, E, M, N and O are sitting around a circular table such that facing towards the Centre. They earn different amounts as their monthly salary. N sits third to the right of B. The one who earns Rs 2790 is the immediate neighbour of N. P earns 5100 and sits second to the right of the one who earns Rs 2790. E sits third to the right of P. Only one person sits between E and O, who sits second to the right of M. M and D are not immediate neighbours.

24. What is the monthly income of N if the code is 'N% and O#'?
(a) 4800 (b) 4780 (c) 4500
(d) 4900 (e) None of these

25. What is the difference of salary of D and E if the code is 'N%, O#, D% and E@'?
(a) 3190 (b) 3200 (c) 3250
(d) 3170 (e) None of these

26. What will possibly be the salary of B if the code is 'P# and B& '(Note B earn more than M)?
(a) 7850 (b) 6520 (c) 2370
(d) 8050 (e) 7580

27. What is the sum of the salary of B and M if the code is 'B% and P#'?
(a) 8250 (b) 7270 (c) 5900
(d) 9170 (e) None of these

28. Statement- Thousands of farmers in drought-hit western Madhya Pradesh have been protesting for over a week demanding that authorities increase the minimum price for their crops and waive their bank loans. Madhya Pradesh is one of several states that have suffered droughts and crop failures in recent years.

Which of the following courses of action will help to improve the current scenario?
(i) Government should punish those involved in the protests.
(ii) Cloud seeding should be used in such situations.
(iii) Government should constitute a team to assess the severity of drought and convince that appropriate compensation will be paid.
(a) Only (I) (b) Both (i) and (ii)
(c) Only (iii) (d) Both (ii) and (iii)
(e) None of these.

Directions (29-33): Study the following information carefully and answer the questions given below.

Seven persons have their birthday on seven different dates of seven different months viz. January, February, March, April, May, June, July. G has birthday on 11. Difference between the dates of birthdays of G and C is 8. The difference between the birthdays of B and F is of more than 9 days but less than 13 days. A's birthday is in the month having least number of days. B's birthday is in a month having 30days. C's birthday is in a month immediately after G but in a month having 30 days. F's birthday is in one of the month after C's birthday. The one whose birthday is in a month having least number of days has birthday on 26. Difference between the dates of the birthdays of C and A is not less than 10. The one whose birthday is in June has birthday on a date which is immediately after A's birthday. F's birthday is on an even date. The one whose birthday is in May month has birthday on an odd date before the date on which B's has birthday. The difference between the birthdays of B and E is more than 36 days but less than 39 days. The difference between the dates of the birthdays of D and A is same as the difference between the dates of the birthdays of A and E.

29. C has birthday in which of the following month?
(a) March (b) May (c) January
(d) April (e) none of these

30. E has birthday on which of the following date?
(a) 21 (b) 19 (c) 20
(d) 25 (e) none of these

31. How many months gap is there between the birthday months of D and E?
(a) Two (b) One (c) None
(d) Three (e) More than three

32. F has birthday on which of the following date?
(a) 11 (b) 8 (c) 9
(d) 27 (e) none of these

33. How many persons have born before C?
(a) Three (b) One (c) None
(d) Two (e) More than three

34. Statement-Drinking in moderation can help our health, some research has showed. Many doctors recommend a glass of wine or beer a night as part of diet plans such as the Mediterranean diet and the DASH diet, which have been proven to keep your heart and brain healthy. However, a new study suggests that even moderate drinking may not be great for your brain.
Which of the following can be deduced from the above statement?
(i) Scientific researches can contradict at times.
(ii) Moderate intake of wine is less harmful than cigarette.
(iii) Something which is not good for brain does not mean it cannot be healthy.
(a) Only (I) (b) Both (i) and (ii)
(c) Only (iii) (d) Both (ii) and (iii)
(e) None of these.

35. From which of the following statements it can be determined that how many persons definitely attend meeting before D (starting from Monday to Saturday)?
(a) F attend meeting on Wednesday. Only one attend between D and F. Only two persons attend between B and C.
(b) Only three persons attend between A and E, who attend after Wednesday. Only two persons attend between E and D. B attend just after D.
(c) No one attend between C and F. B attend on Saturday. Only two persons attend between F and B. D attend on one of the days before C.
(d) A attend on Thursday. Only two persons attend between C and A. Only three persons attend between B and D, who attend after A.
(e) Cannot be determined from any of the statements.

36. If 'BEST MIND ' is coded as '%&#© Ω®€μ' BROWN DOME' is coded as '%∞¥£€ μ¥Ω&' 'CLUB MONTH' is coded as ' Σ ΦΔ% Ω¥€©Ψ then in the given coded pattern how 'WORD STEM HOUR' is coded ?
(a) £¥∞μ ©®Δϕ Ψ¥Δ∞ (b) £Øμ Ω #©&Ω Ψ$Δ∞
(c) #©&Ω Ψ$Δ∞ £¥∞μ (d) £¥∞μ #©&Ω Ψ¥Δ∞
(e) None of these

37. Statement- Promos Marketing is a kind of marketing in which people used to buy those products again and again with the one they are more familiar with as compared to the newly introduced one.
Which among the following is most similar type of Marketing?
(a) A well-known brand has not changed its logo from past 10 years and still making profit from its product.
(b) 'Wister' Company has launched a new product and advertised it with old theme songs so that everyone is aware of it and also making profit from it.

(c) Arista Company used to launch its new products with the name of famous action movies so that it became popular among people.
(d) A famous toothpaste brand used to add a new ingredient with the existing one time to time without changing its packaging so that it remains popular among people.
(e) All are similar types of marketing.

38. **Statement-** A car company 'Aristo' was famous car manufacturing company 7 years ago but company's production has been declining from past 5 years. So, after all these mis happenings the company is forced to shut down now.
Which of the following could be the most possible reason for the above-mentioned statement?
(a) The company did not have enough funds to buy raw material which was required for the product.
(b) The employees of the company are not satisfied in their job.
(c) The machinery was too old and was not in proper working condition.
(d) The demand of the product has been declining from past 5 years.
(e) The rival company's car are fully automatic and is composed with all new features.

39. Statement- The reason for Trump's victory in USA elections was that the Voters believed their political apparatus was corrupt and Trump was the only one who reliably affirmed that belief and promised to fix it. While Hillary Clinton held campaign rallies with Beyoncé and Jay-Z, Trump was out talking about the "forgotten" working class, which in turn exacted a "revenge" on the political elite by voting for him.
Which of the following can be inferred from the given statement?
(a) Hillary Clinton is a corrupt leader.
(b) Trump is the only leader who is concerned about the working class.
(c) Only working class voted for Trump.
(d) The reason for trump's success is the polarization of the people towards Trump as he was taking out all the issues and problems of general public.
(e) The reason of Hillary Clinton's defeat was the campaign rallies with Beyoncé and Jay-Z, which backfired on her.

40. Statement- As the festive season is round the corner, the country is on high alert due to rise in the level of pollution. So, Government has given the orders to use green crackers in place of conventional crackers just few days before Diwali. These green crackers are environment friendly and cost effective fire-crackers and produces 20-30% less pollution over conventional one.
Which of the following is incorrect with respect to the given statement?
(I) Fire crackers release pollutant which in turn mixed with air and cause pollution.
(II) In festive season the level of pollution gets increased.
(III) The government is taking various steps to decline the level of pollution.
(IV) The green fire crackers are quite expensive, so the shopkeepers will have to bear loss.
(a) I and II (b) II and III (c) I and IV
(d) only IV (e) only III

Directions (41); Study the following information carefully and answer the question given below:
ABCD is a rectangle such that A is North of B. C is North of D. Distance AC is 200m and the longer side is 2 km.
EFGH is another rectangle in which E is north of G and F is North of H. Distance EG is 400m.
EFGH intersects ABCD such that EF intersects AB and CD at I and J respectively.GH intersects AB and CD at K and L respectively.
AK = 1.6 km
EJ = 0.9 km

41. Which of the following statements correctly depicts the directions if one person Karan standing at point D wants to travel to point E?
(a) He walks 800m North, turns left and walk 0.7 km again turns left and walks 0.6km.
(b) He travels 400m North, turns left and walks 200m, turns right and walks 400m again turns left and walks 700 m.
(c)He travels 2km North, turns left and travels 200m, again turns left and walks 1.6km.
(d) He travels 400m North, takes a left turn and travel 900m, now takes a right turn and travel 400m.
(e) Cannot be determined from any of the statements.

42. A set of words are given in each option, you have to first arrange each alphabet according to alphabetical series within the word then by using third letter from each word you have to decide from which set a meaningful word is not formed by rearranging them.
For example:
(1. TPSOU, RAWTY, OBRHA, OBTAS, GNEBI
First Arrange them in alphabetical order
OPSTU, ARTWY, ABHOR, ABOST, BEGIN
Now using third letter from each word i.e. S, T, H, O, G
Meaningful word will be GHOST.)
(a) FTEID, MESAT, OCLKP, GSIUD
(b) UGJYL, WTUZ, GERNC, PDOFV
(c) USVH, NDPMH, ETCNB, ITSD, OVEN
(d) QHFWA, MBNRH, SEVJ, TKXGU
(e) None of these

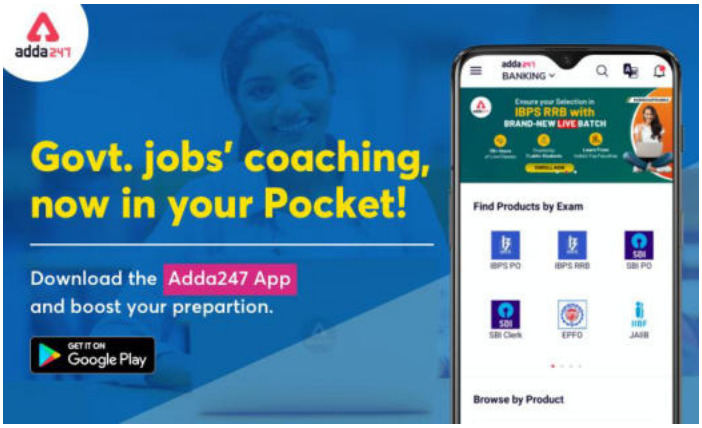
Direction (43); In the following questions, the symbols #, &, @, * , $, % and © are used with the given meanings as illustrated below. Study the following information and answer the given questions:

A person saves 15 chocolates and rest gives to his wife. A mother saves 45 chocolates and gives rest to his son . A person saves 25 chocolates and gives rest to his sister.
A@B- A is the child of B.
A©B- A is the parent of B
A$B- A is brother of B
A*B- A is wife of B
A#B- A is sister of B

43. From the above information which of the following relation is true
(i) U$C*W©S$N#S If 205 chocolates are given to U then N receives 105 chocolates.
(ii) S#Z*F©J#P$J, If 175 chocolates are given to S then J receives 70 chocolates.
(iii) K*L©O$M#O, If 250 chocolates are given to L then M receives 165 chocolates.
(a) all (i),(ii) and (iii) are true
(b) only (i) and (ii) are true
(c) only (ii) and (iii) are true
(d) only (ii) is true
(e) only (iii) is true

44. Statement- There is a company in which there are three different groups of employees in which each of the employee gets salary in three different ways. In the first group, each employee gets complete salary in an envelope. In second group, each of the employee gets salary in two equal parts in two envelops. In third group, each employee gets salary in an envelop having their child's name on it. All the employees of third group spend least among all and employees of second group spend less than the first one.
What may be the thought process of the company behind this step?
(I) It is a policy of the company as the employees are categorized in three groups based on their performance.
(II) It is human psychology as those who get salary in two parts spend less. Because they would think before spending the second envelop. And third group spend least as it contained their child's name which itself has some emotional quotient. So, it will promote the saving habits among employees.
(III) Company divided the employees in three groups according to their saving habits as those who are in second group are more saving oriented as compared to the first one.
What could be the reason behind the less spending of second group as compared to the first one?
(a) I and II (b) II and III (c) I and III
(d) only II (e) only III

45. Delhi metro commuters may face tough time from Saturday as Metro's 9,000-odd non-executive employees have threatened to go on a strike from June 30 after little headway during talks between the management and the workers. The non-executive workforce including train operators, station controllers, technicians, operations staff, maintenance staff, have been protesting since June 19 at various depots and control rooms of the Delhi Metro for revision of salaries and other issues.
The workforce play a critical role in running the Metro network and the strike may totally cripple the services. Last year too, Metro services had come to the brink of a shutdown when the non-executive staff had threatened to go on strike on similar demands. The crisis was, however, averted at the last moment after the DMRC management and staff council came to an agreement following a series of meetings. The employees are demanding pay hike, payment of arrears, right to form a union and fixed guidelines for sacking an employee only in extreme conditions.
(a) Both Bold statement and Underlined statement are cause and Italic is the effect
(b) Bold statement is the effect while Italic statement is cause
(c) Underlined statement is effect while Bold statement is cause
(d) Italic Statement is effect while Underlined statement is cause.
(e) Both Bold statement and Underlined statement are effect while Italic is cause



QUANTITATIVE APTITUDE

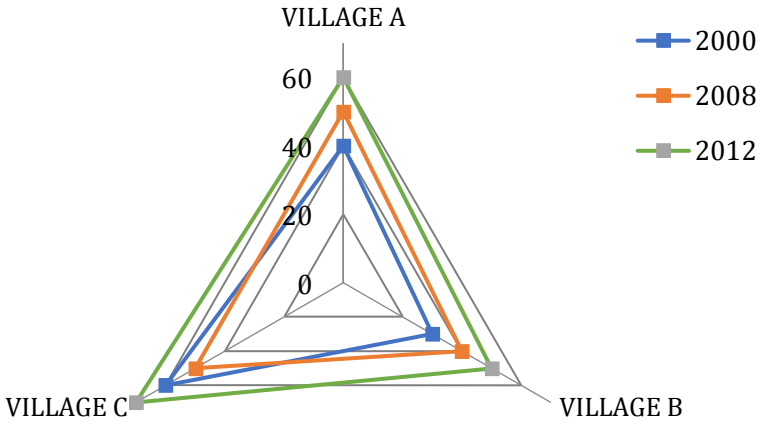
46. There is a rectangular path just inside a rectangular park. Width of the path is 2 cm. If length of park is decreased by 4 cm then, it becomes a square. Area of the rectangle is $1\frac{1}{3}$ times the area of the path.
From the above given information which of the following can be found out.
(i) Area of path
(ii) Length of the park
(iii) Sum of perimeter of the rectangular park and perimeter of the path (both external and internal perimeter)
(a) only (ii) (b) only (ii) and (iii)
(c) only (i) and (iii) (d) all of the above
(e) only (iii)

47. A man invest 50% of the amount invested by B. B withdraw whole amount from the business after 4 months. C joins the business with the investment of X Rs in a month after B had withdrawn from the business. At the end of the year A and C share same amount of profit.
→ if investment of B is Rs 2400 then which of the following may be the investment of the C.
(i) . 1800 (ii) . 3600 (iii) . 2400
(iv) . 7200 (v) . 5400
(a) (i) and (iii) (b) only (iii)
(c) (i), (ii) and (iii) (d) (i), (ii), (iii) and (iv)
(e) (i), (ii) and (iv)

48. A certain number of men can complete a work in six hours less than the time taken by some women.
Work completed by one man in one hour is same as the work completed by one woman in one hour.
→ Which one of the following ratio of number of men to number of women can satisfy the above given condition
(i) . 5:6 (ii) . 10:3
(iii) . 8:5 (iv) . 10:7
(a) only (ii) (b) only (ii) and (iii)
(c) only (i) and (iii) (d) all of the above
(e) only (ii), (iii)and (iv)

Direction (49-51): Study the given graph given below and answer the following questions

The graph given below shows the percentage of literates in three different villages in three years



49. If population of A in 2000, 2008 and 2012 is in ratio 2 : 3 : 4 and average of literate in 2008, 2012 and 2000 be 1410 then find population of village A in 2000.
(a) 1700 (b) 2000 (c) 2100
(d) 1800 (e) 2200

50. Population of village C continuously decreases from 2000 to 2012 and it decreases by the same number in 2012 from 2008 as it decreased in 2008 from 2000. If literate in C in 2008 and 2012 are same then population of C in 2012 is what percent less than population of C in 2000.
(a) $44\frac{2}{7}\%$ (b) $44\frac{3}{7}\%$ (c) $41\frac{2}{7}\%$
(d) $44\frac{4}{9}\%$ (e) $45\frac{4}{9}\%$

51. Sum of literate from village B in 2000 and 2008 is 1530 and sum of literates in 2008 and 2012 is 2010 If sum of literates from villages B in all the given years is 2490 then find population of village B in 2008.
(a) 2625 (b) 2200 (c) 2000
(d) 2150 (e) 2050

52. Two numbers A and B are given
What is A + B ?
(i) LCM of A and B is 44 times their HCF
(ii) The sum of LCM of A & B and their HCF is 540.
(iii) $\frac{A}{10} + \frac{B}{10}$ is an integer.
(iv) A + B > 150
Which of the given statements are redundant to find the answer of the question.
(a) statement (ii) (b) statement (iii)
(c) statement (iv) (d) statement (i)
(e) Answer cannot be determined even after using all the statements.

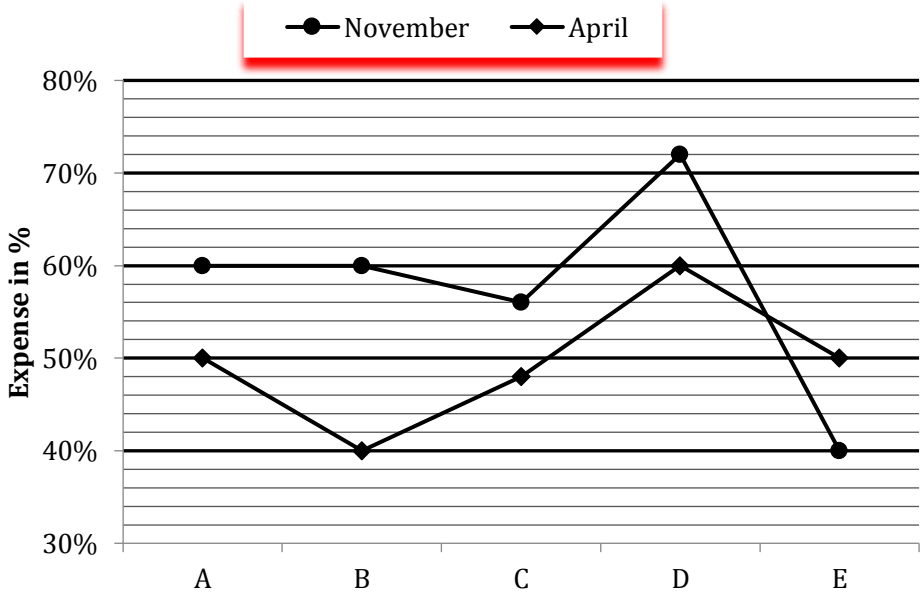
53. A vessel has 200 litre of milk and 40 litre of water. If litres of mixture is taken from the vessel and ____ litres of water is added to the remaining mixture, then the final amount of milk in the vessel becomes 125 litre more than the amount of water in it. Which of the following integral values given in the options are possible in the blanks in same order?
(A) (36, 11) (B) (30, 15) (C) (42, 12)
(D) (24, 19) (E) (18, 24)
(a) only A (b) only A, B and E
(c) only A and B (d) only A, B and D
(e) All four are possible

54. A bag has 15 red, green and blue balls. Number of each balls is different in the bag. Difference between red ball and green ball is same as difference between green ball and blue ball. Probability of selecting one blue ball from the bag is greater than 0.2, then number of blue balls in the bag can be
(a) 3 (b) 4 (c) 5
(d) 7 (e) 9
(a) Only b), c), d) and e) (b) Only b), d), e)
(c) All a), b), c), d) and e) (d) Only c), d), e)
(e) Only a), b), d), e)

55. Marked price of an article is 60% more than the CP of the article. When it is solid at x% discount then _____% percent profit is obtained and when it is sold at a discount of 2x% , _____% profit is obtained.
Which of the following options are possible for the blanks in same order
A. 60, 30 B. 20, 8 C. 48, 24
D. 36, 12 E. 44, 28
(a) A and E (b) B, D and E (c) C,D and E
(d) All are possible (e) A, D and E

56. A set of five two-digit integers numbers is given. Average of first and last number is middle number. Second number is half of first number. Sum of first three numbers is 127. Middle number is (A) and average of five numbers is (B). Fourth number is 62. What can be the values of (A) and (B) respectively?
(a) 64, 50 (b) 62, 55 (c) 62, 50
(d) 64, 55 (e) 60, 55

Directions (57-59): Line chart given below shows expense of five persons (in %) out of total income of two months. Income of persons is same in both months.



Total Income = Expenditure + Saving

57. Find the difference between income of D and E ?

(I) Difference between expense of 'D' in November and saving of 'E' in April is Rs 3200.

(II) Difference between Saving of 'D' in April and Expense of 'E' in November is Rs 8000.

(a) Statement **(I)** alone is sufficient to answer the question but statement **(II)** alone is not sufficient to answer the questions.

(b) Statement **(II)** alone is sufficient to answer the question but statement **(I)** alone is not sufficient to answer the question.

(c) Both the statements taken together are necessary to answer the questions, but neither of the statements alone is sufficient to answer the question.

(d) Either statement **(I)** or statement **(II)** by itself is sufficient to answer the question.

(e) Statements **(I)** and **(II)** taken together are not sufficient to answer the question.

58. Average saving of 'C' in both months is Rs 19,200 while A's income is 20% more than C's income. Find expense of 'A' in the month of November

(a) Rs 9600 (b) Rs 19200 (c) Rs 38400

(d) Rs 24000 (e) Rs 28800

59. 'B' invested some amount of his saving in PPF account in November. Find the amount invested by 'B' in PPF account?

(I) Amount invested by 'B' in PPF is 62.5% less than amount expend by 'B' in April while difference between amount expend by 'B' in November and April is Rs. 16,000.

(II) 'B' invested 37.5% of his saving in PPF account while difference between saving of 'B' in November and April is Rs 16,000.

(a) Statement **(I)** alone is sufficient to answer the question but statement **(II)** alone is not sufficient to answer the questions.

(b) Statement **(II)** alone is sufficient to answer the question but statement **(I)** alone is not sufficient to answer the question.

(c) Both the statements taken together are necessary to answer the questions, but neither of the statements alone is sufficient to answer the question.

(d) Either statement **(I)** or statement **(II)** by itself is sufficient to answer the question.

(e) Statements **(I)** and **(II)** taken together are not sufficient to answer the question.

Directions (60-62): Given below is the information about wind mills in four different villages A, B and C and D. Number of wind mills in villages A, B, C and D are 24, 20, 15 and 12 respectively. Number of electricity units produced in one week by one wind mill when they operate with maximum efficiency in village A, B, C and D is 2 lakh units/week, 80000 units/ week, 1 Lakh units/week and 1.5 Lakh units/week respectively. Number of houses in each village A, B, C and D are 540, 240, 150 and 350 respectively. Total units produced are consumed equally by each house in the village

→ Different number of winds mills are operate in four different weeks

In first week number of wind mills are operative in village A, B, C and D are 75%, 50%, 40% and 75% respectively. In second week it is 50%, 75%, 60% and 50% respectively. In third week it is 75%, 100%, 80% and 50% respectively. In fourth week it is 100%, 50%, 60% and 75% respectively.

→ Given below is the three ranges of efficiency of a wind mills (number of unit produced /Week by one mill)

Efficiency Type	Range
Efficiency 1	60% - 70%
Efficiency 2	45% - 55%
Efficiency 3	30% - 40%

Three wind mills also operate on different levels

→ level 1 : Consider upper limit of range of efficiency

→ level 2 : consider mid of range of efficiency

→ level 3 : consider the lower range of efficiency

Eg. If a wind mill is operative at efficiency 2 then its level 2 efficiency will be $= \frac{45+55}{2} = 50\%$

Its level 1 efficiency will be 55%

Its level 3 efficiency will be 45%

60. What is the ratio of total production of village A in First week at level 1 of efficiency 2 to the total production of village B in second week at Level 2 of efficiency 1.

(a) 20 : 13 (b) 33 : 13 (c) 33 : 19

(d) 27 : 19 (e) 27 : 13

61. Total units produced in village C in second and fourth week at level 1 of efficiency range 1 is what percent of total units produced in village A in first and fourth week at level 2 of efficiency range 1

(a) $25\frac{7}{13}\%$ (b) $23\frac{21}{273}\%$ (c) $13\frac{12}{13}\%$

(d) $22\frac{5}{13}\%$ (e) $24\frac{5}{13}\%$

62. What is the ratio of units consumed per house in village B in week 4 operating at level 3 of Efficiency range 3 to the units consumed per house in second week at level 1 of efficiency range 2 of the village C?

(a) 5 : 6 (b) 13 : 19 (c) 15 : 19

(d) 13 : 33 (e) 10 : 33

Directions (63-65): There are three quantities provided in the questions. You have to find out the values of the quantities and compare them according to the given codes as follows

@ → >
& → <
*** → ≥**
$ → ≤
 # → = (or relationship can't be established)

Example :
uantity I: $3^2 + 5^3$
uantity II: $5^2 \times 2^2$
uantity III: 100
(a) @, $ (b) *, # (c) $, #
(d) &, * (e) @, #
uantity I > Quantity II = Quantity III
So, answer is (e)

63. Quantity I: $360\ m^7n^9 \div 120\ m^{-2}\ n^3 \times 24m^{-4}\ n^4$; m>0, n<0
Quantity II: $240\ x^9y^7 \div 60x^4y^3 \div 3x^{-2}y^3$; x<0, y<0
Quantity III: $48\ a^8b^{12} \times 5\ a^3\ b^{-4} \div 6a^6b$, a>0, b<0
(a) (@, &) (b) (#, @) (c) ($, @)
(d) (&, @) (e) (*, #)

64. 'p', 'q','r' and 'n' are positive integers.
Quantity I: 'p' :– $\frac{(p+n)^2-(p-n)^2}{8pn(p+n)^2} = 1$
Quantity II: 'q' : – $\frac{(q+n)^3-(q-n)^3}{(n^2+3q^2)^2} = \frac{1}{8n}$
Quantity III: 'r' : – $\frac{\sqrt{r+n}+\sqrt{r-n}}{\sqrt{r+n}-\sqrt{r-n}} = 2$
(a) (@, &) (b) (#, @) (c) ($, @)
(d) (&, @) (e) (*, #)

65. Quantity I – Coaching teacher asked a question to three students A, B & C and probability of question not being answered by three students is 0.5, 0.4, 0.7 respectively. Find the probability that at most two students will solve the question.
Quantity II – A bag contains 5 green balls & 7 red balls, if three balls drawn at random from bag, then find probability of getting at least 1 green ball.
Quantity III – Arun speaks the truth 4 out of 5 times, and Bhavya speaks the truth 6 out of 7 times. What is the probability that they will contradict each other in stating the same fact?
(a) (@, &) (b) (#, @) (c) (@, @)
(d) (&, a) (e) (*, #)

66. Vijay can cover 'D' distance with 'S' speed in 'T' time. He can cover same distance with 'S + 10' speed in '(T – 2)' time. He can cover same distance 'D' with 'S – 15' speed in (T + 6)' time. What can be found from the given data.
(i) time to cover 200 km with speed 'S + 10'
(ii) distance covered in (T + 6) time with (S + 10) speed
(iii) speed by which a tunnel can be crossed in $\frac{T}{2}$ hour
(iv) Ratio between time to cover distance 'D' with speed 'S' to time to cover distance (D – 5) with speed (S + 10)
(a) only (ii) (b) only (ii) and (iii)
(c) only (i) and (iii) (d) all of the above
(e) only (i), (ii) and (iv)

67. Two trains A and B cross each other in 12 seconds when they move towards each other. Speed of train A and train B is 81 km/hr and 54 km/hr respectively. Length of train A is 150 metre more than length of train B.
Which of the following can be obtained from the above given information.
(i) Time taken by train B to cross a man moving in same direction as of train B.
(ii) Time taken by train A to cross a platform of half of its length.
(iii) Length of train A.
(iv) Speed of another train C whose length is equal to average of length of train A and B.
(a) (i) and (iii) (b) (i), (ii) and (iii)
(c) (ii) and (iii) (d) All (i), (ii), (iii) and (iv)
(e) (i) and (iv)

68. When the digits of a two digit natural number are interchanged then original number is greater than three times the new number so obtained. How many such natural numbers are there which satisfy the above given condition? Ignore the numbers which have '0' in its unit place.
(a) 5 (b) 6 (c) 7
(d) 8 (e) 9

69. Veer invested Rs.10000 at simple interest for 2 years at the rate of R% and gets an interest of Rs1400. He invested total amount (Principle + Interest) in a scheme, which offered compound interest at the rate of (R%+x%) for two years.
What are the possible integral values of 'x%' so that obtained compound interest is less than Rs.2400
(i). 1% (ii). 2% (iii).3%
(iv). 4% (v). 5%
(a) Only (i) (b) Only (i), (ii)
(c) Only (i), (ii) and (iii) (d) Only (i), (ii), (iii) and (iv)
(e) All of the above

70. Ratio between marked price of article A to article B is 4 : 5. Shopkeeper allowed d% discount on article 'A' and (d + 18)% discount on article 'B', so selling price of both articles become equal. If shopkeeper made a profit of 20% on article A and 25% on article B and profit made on article B is Rs. 384 more than that of article A, then find the cost price of article 'A' and article 'B' respectively?
(a) 9000 Rs. 8400 Rs (b) 9600 Rs. 9216 Rs.
(c) 9800 Rs. 9012 Rs. (d) 9600 Rs. 8488 Rs.
(e) 9200 Rs. 9216 Rs.

Direction (71-74): Study the data given below and answer the following questions

Data is provided for 3 months for a water tank whose capacity is 600000 L to provide continuous water supply to a building. Water tank is first completely filled and then it gets completely emptied to supply water in a building. It supply water continuously to the building and is refilled again and again to provide continuous supply. In the building there are 40 flats in which all flats may or may not be completely occupied in the given three months.
November → Each flat is filled with a tap from which rate of flow of water is 250 L/h and only 50% flats are occupied in November. Water tank provides continuous water supply to these taps in whole month.
December → In this month 30 flats are occupied and tank gets emptied after 4 ⅙ days. Rate of flow from one tap in December is **A** % more or less than rate of flow from one tap in November.
January → Rate of flow of water from the taps is same as of November and gets emptied after supplying water to building for 100 hr. Number of flats occupied in January is **B** %

71. In November tank has to be filled how many times?
(a) 5 (b) 6 (c) 8
(d) 7 (e) 9

72. What is the value of **A**%
(a) 30% (b) 25% (c) 33 ⅓%
(d) 20% (e) 15%

73. What is the value of **B**%
(a) 80% (b) 40% (c) 75%
(d) 60% (e) 70%

74. In October efficiency of each tap decrease by 20% due to leakage as compared to efficiency of november and capacity of tank is reduced to 80%. In how many hours tank will be emptied in October if total occupied flats in October is equal to no. of occupied flats in December
(a) 65 hours (b) 70 hours (c) 30 hours
(d) 60 hours (e) 80 hours

Directions (75-77): Given below is the sequence of series. Analyze the pattern of the series and answer the given following questions.

75. 1, 3, 9, 31, 129, 651
2, _, _, _, ___, ?
(a) 625 (b) 37 (c) 153
(d) 771 (e) 631

76. 4, 2, 2, 3, 6, 15, 45
If $(2835)^n$ is the term of the sequence where n is the nth term of sequence then find 'n'.
(a) 8^{th} (b) 9^{th} (c) 10^{th}
(d) 11^{th} (e) 12^{th}

77. A series is 113, 170, 232, 303, 399, 556, 838. Another series is 93, _, _, _, _, _, m. Which follows same pattern as given number series. Then m= ?
(a) 808 (b) 443 (c) 626
(d) 818 (e) 909

78. A can do a task in 18 days, B can do the same task in 24 days and C can destroy the whole work in 36 days. If A & B work for first x days together after that C also joined them, remaining work is completed in $\left(x+4\frac{4}{5}\right)$ days. Find how many days all three worked together?
(a) $6\frac{4}{5}$ days (b) $5\frac{4}{5}$ days (c) $4\frac{4}{5}$ days
(d) $7\frac{4}{5}$ days (e) $8\frac{4}{5}$ days

79. A boat goes 28 km downstream and while returning covered only 75% of distance that covered in downstream. If boat takes 3 hr more to cover upstream than downstream then find the speed of boat in still water (km/hr) if speed of stream is $\frac{5}{9}$ m/sec ?
(a) 8 km/hr (b) 2 km/hr (c) 5 km/hr
(d) 4 km/hr (e) 3 km/hr

80. A cylindrical vessel with radius and height of 17.5 cm and 18 cm respectively is filled upto 80% of its capacity with milk. If total milk from cylindrical vessel transferred into 30 cuboidal vessels whose length and breadth is 7 cm & 3 cm respectively. Find height of each cuboidal vessel?
(a) 18 cm (b) 25 cm (c) 23 cm
(d) 20 cm (e) 22 cm

ENGLISH LANGUAGE

Directions (81-84): Read the following passage and answer the questions as directed.

One of the easiest ways to establish a savings habit is to participate in your employer's 401(k) plan. Funds are withheld from each paycheck and deposited into your account. If your employer matches part of your contribution — and many do! — you will accumulate yet more. A second way to consistently save is with an automatic savings transfer program with your financial institution. You decide how much and when you want funds transferred from your checking account into a savings account. You can also use a payroll deduction plan from your employer and get the same results.

Along with how much and how often you save, what you earn on your funds will determine how fast your money grows. You cannot control what happens with interest rates or the stock market, but you can consider different types of savings vehicles that provide different returns. The simplest savings vehicle to consider is buying certificates of deposit (CDs) instead of leaving funds in a savings account. CDs usually offer higher interest rates, but they are time deposits and have for early withdrawal. If you can accept not having immediate access to your funds, CDs can be an attractive savings vehicle.

81. Which of the following can be inferred as the theme of the passage?
(a) Certificate of deposits is the best way to establish savings habit.
(b) Establishing a consistent saving habit and also smart saving with CDs.
(c) Employer's 401(k) plan provides a convenient way for consistent and smart savings.
(d) Your savings decide how well you flourish and grow.
(e) None of the Above

82. Which of the following can replace the word given in bold in the passage?
(a) though (b) even (c) quitely
(d) accrue (e) more

83. What is the tone of writing in the passage?
(a) Satirical (b) Critical (c) Didactic
(d) Sarcastic (e) Nostalgic

84. Which of the following words can fill in the blank to make it meaningful?
(a) gifts (b) lucrative (c) casualities
(d) penalties (e) None of the Above

Directions (85-87): Read the following paragraph and answer the questions as directed.

Budgeting is an important tool for saving. First, you need to segregate all your income and expenses. Now, categorise your expenses as least important, important and very important to prioritise them while settling them through your income, which is limited. Try to figure out ways in which you can increase expenses. Ensure that your income exceeds the expenses with as wider a margin as possible. The surplus fund after meeting all the expenses would be your saving. It is only after you have assured savings that you can thinking about investment.

85. Which of the followings is the correct chronology of steps as can be inferred from the passage?
(a) Saving-Budgeting-Investment
(b) Investment-Budgeting-Saving
(c) Budgeting-Saving-Investment
(d) Budgeting-Investment-Saving
(e) None of the Above

86. Which of the following words, opposite of the word given in bold, should replace the word given in bold in the passage?
(a) Enhance (b) Curtail (c) Damage
(d) Lengthen (e) Leverage

87. Which of the following is the best way of writing the line given in italics in the paragraph, without changing its intended meaning?
(a) Surely, the income will exceed the expenses by a wider margin.
(b) The income will be greater than the expenses is not a possibility.
(c) Make sure that the income is greater than the expenses by a margin as wide as possible.
(d) If the income does not exceed the expenses by a wider margin, it will be useless.
(e) None of the Above

Directions (88-90): Read the following paragraph and answer the questions as directed.

The way most of us save is to put away whatever is left after all expenses are taken care of, or put away any surplus income. But that is not the best way of saving and there are chances of us falling short. A very stringent savings plan that favours future demands over current aspirations is also likely to fail. Instead, a better approach is where due consideration is given to current and future needs. This will help divide the available income between current consumption and future saving. If an expense or a need is too large to be met out of the regular income, earmark it for the future. So the way to buy a coveted watch is not to swipe the credit card and commit yourself to debt, but to set aside money from your current income and buy the watch when you have the required funds.

88. Which of the following can be best inferred from the paragraph?
(a) The better way to save is to give due consideration to current and future needs and plan accordingly.
(b) It's better to buy the things that you require at present than to save money and buy them later.
(c) Buying a watch is more important than saving for the future.
(d) A stringent savings plan will produce a good result for the future.
(e) None of the Above

89. Which of the following word should fill in the blank in the paragraph?
(a) stringent (b) bad (c) unethical
(d) moneywise (e) Both (a) and (d)

90. Which of the following can be next line after the last line of the given paragraph?
(a) Most of us never have enough money for immediate expenses as well as saving.
(b) There will be a lot of unwanted expenses that can creep in every now and then.
(c) If we had enough money to meet our current expenses and future goals, there would be no problem.
(d) Expenses or needs that have to be met at a point of time in the future are called goals.
(e) Just as we segregate the essential and less important things in our shopping list, do the same with your goals.

Directions (91-93): Read the following passage carefully and answer the questions given below it. Certain words are given in bold to help you locate them while answering some of the questions.

Pakistan's Army and political leadership are on "one page" to take dialogue with India forward, Pakistan's Prime Minister Imran Khan said on Wednesday at the ground-breaking ceremony for the corridor. Pakistan's Chief of Army Staff General Qamar Bajwa was also present.

The four-kilometre corridor from the border with India will allow pilgrims easy access and will be ready in time for Sikh founder Guru Nanak's 550th birth anniversary on November 23, 2019.

In a speech largely reaching out to the Indian government to "break the shackles of the past" and restart engagement, Mr. Khan also struck a discordant note on Kashmir, referring to the dispute as the "single issue" between India and Pakistan. India has maintained that terrorism sponsored by Pakistan is holding back the dialogue process. Asked about the reference, Ms. Badal told The Hindu that the remark didn't change the Indian stand.

91. Which of the following assumptions could be drawn out most appropriately from a clause in the first paragraph 'Pakistan's Army and political leadership are on "one page" to take dialogue with India forward'?
(I) In Pakistan, to have a dialogue with India, there should be a consensus between Pakistan's Army and the Pakistan's political leadership.
(II) There is a paper of high strength present in Pakistan where Pakistan's Army and the Pakistan's political leadership could stand together.
(III) Pakistan's political leadership could independently take forward dialogue with India.
(a) Only (II) & (III) (b) Only (I)
(c) Only (I) & (II) (d) All of (I), (II) and (III)
(e) None of (I), (II) and (III)

92. What does Mr. Khan mean by referring to the Kashmir dispute as the "single issue" between India and Pakistan?
(a) According to Mr. Khan, there is only one issue between India and Pakistan which needs to be solved.
(b) According to Mr. Khan, dispute on Kashmir is an issue among other important unresolved issues between India and Pakistan which has the highest importance.
(c) According to Mr. Khan, Kashmir is a part of both India and Pakistan.
(d) According to Mr. Khan, India and Pakistan have failed to resolve the issue between India and Pakistan.
(e) None of the above

93. Which of the following words has the meaning which is SIMILAR to the meaning 'discordant'?
(a) Ugly (b) Concur (c) Accord
(d) Clashing (e) Endorsement

Directions (94-96): Read the following passage carefully and answer the questions given below it. Certain words are given in bold to help you locate them while answering some of the questions.

The government is of the view that IndiGo and SpiceJet should withdraw their web check-in fee, according to a top source in the Ministry of Civil Aviation.

IndiGo and SpiceJet recently revised their web check-in policies to include a levy for air travellers opting for web check-in for any seat in an aircraft. Earlier, passengers would have to pay extra only for certain preferred seats. "We have told the two airlines to remove the new fee," the source told The Hindu. The Ministry had already met the airlines' officials and would be holding another meeting with them.

Asked how the government could intervene since airlines were allowed to unbundle fares and charge separately for preferential seating, meal-on-board, check-in baggage and use of airline lounges, a senior official said airlines should incentivise web check-in.

94. Which of the followings, as mentioned in the passage, could create hurdles for the government in its desire to intervene and convince Indigo and SpiceJet to withdraw web check-in fee?
(a) Ministry of Civil Aviation or government has no authority to give directions to airlines.
(b) Airlines can unbundle air-fare and charges for services.
(c) Making airlines to withdraw web check-in fees would invite protest from them and they would stop operating their aircrafts.
(d) Options (a), (b) & (c)
(e) None of the above

95. Which of the following statements, if true, would encourage the government to convince Indigo and SpiceJet to withdraw their web check-in fee?
(I) Keeping web check-in free would encourage passengers to opt for it, would allow the passengers to come to airport not too early and in effect would help in controlling the number of passengers in an airport and would help the security personnel in the security management of an airport.
(II) Levying fee to web check-in would either make air-travel costly or increase discomfort to the airline passengers. This might discourage people to opt for air travel and would be against the aspiration of the government to increase the overall number of air travel passengers.
(III) Levying fee to web check-in would discourage the passengers to opt for it and might decrease the usage of internet to avail important services, in contradiction to the objective of the Digital India Initiative.
(a) Only (II) (b) Only (I) & (II)
(c) Only (II) & (III) (d) None of (I), (II) & (III)
(e) All of (I), (II) & (III)

96. Which of the following words has a meaning which is OPPOSITE in meaning to the word 'withdraw'?
(a) abolish (b) separate (c) remove
(d) rescind (e) approve

Directions (97-99): Read the following passage carefully and answer the questions given below it. Certain words are given in bold to help you locate them while answering some of the questions.

Noting that the 1984 anti-Sikh riots were a "dark chapter in the history of independent India," the Delhi High Court on Wednesday upheld the conviction of 70 persons on the charges of rioting, burning houses and violating curfew in the Trilokpuri area in the national capital.

The riots took place after the assassination of Indira Gandhi. Justice R.K. Gauba dismissed the appeals of the convicts against the August 27, 1996, judgment of a sessions court here, sending 89 persons to jail for five years.

The judge said: "Thirty-four years have passed, yet the victims await justice and closure." Of the 89, 16 died during the pendency of the trial before the High Court, which dragged on for 22 years. The court dismissed the appeal of three more convicts who absconded during the trial.

"The manner of prosecution of the case at hand would undoubtedly go down in the judicial history of this country as an example of criminal law process that must never be emulated," the High Court said.

97. Why did the Delhi High Court use the phrase 'Dark Chapter in the history of Independent India'?
(a) The 1984 anti-Sikh riots were not religiously motivated riots.
(b) The 1984 anti-Sikh riots led to the defense of innocent people belonging to several communities
(c) The 1984 anti-Sikh riots were shameful events in the history of independent India.
(d) Options (a) & (b)
(e) All of (a), (b) & (c)

98. What is the opinion of the Delhi High Court about the manner of prosecution of the 1984 anti-Sikh riots?
(a) The manner of prosecution of the 1984 anti-Sikh riots has been effective in delivering justice.
(b) The manner of prosecution of the 1984 anti-Sikh riots has been very pathetic and must not be repeated in the Indian Judiciary.
(c) The way prosecution of the 1984 anti-Sikh riots was conducted provided timely justice to the victims.
(d) Options (a) & (c)
(e) None of the above

99. Which of the following words has a meaning which is SIMILAR in meaning to the word 'absconded'?
(a) Emulated (b) Surrendered (c) Appointed
(d) Escaped (e) Arrested

Directions (100-101): Read the following passage carefully and answer the questions given below it. Certain words are given in bold to help you locate them while answering some of the questions.

Justice Kurian Joseph, one of the senior-most judges of the Supreme Court, on Wednesday said the courts had been imposing the death penalty "arbitrarily and freakishly". Justice Kurian, in his judgment while heading a three-judge Bench hearing the appeal of a man sentenced to death, said the test of "rarest of rare" had been "inconsistently applied" by courts. The other two judges, Justices Deepak Gupta and Hemant Gupta, disagreed that death penalty was "freakishly" imposed.

100. Which of the followings judges believe that courts have failed to uphold the principle of justice?
(a) The given passage doesn't talk if courts have failed to uphold the principle of justice.
(b) Justice Deepak Gupta
(c) Justice Hemant Gupta
(d) Options (b) & (c)
(e) Justice Kurian Joseph

101. Which of the following words has a meaning which is OPPOSITE in meaning to the word 'disagreed'?
(a) bickered (b) haggled (c) contended
(d) concurred (e) feuded

Directions (102-111): Read the given passage carefully and answer the questions.
The system of "local welfare" schemes set up less than five years ago to provide emergency help to England's poorest families, often to help them cope with delays and sanctions to their benefits, is on the
(A) of collapse, say poverty campaigners. (B) A survey of more than 150 council-run schemes by Church Action on Poverty found that nearly a quarter had been shutted down since 2013, while a further quarter have reduced spending by 85% or more. More are expected to close in the next few months. (C) The destitution (1) of local welfare would put tens of thousands of vulnerable (2) people at increased risk (3) of hunger, debt and demise (4), the charity said. The system was designed to help people on low incomes deal with unexpected hardship, (D):----------, or domestic crises such as broken boilers, house fires and flooding. Huge cuts to council budgets have left the system, which replaced the old social fund, struggling to survive. Provision is so uneven that thousands of people cannot access emergency help from the state, Church Action on Poverty said. "Local authority welfare schemes are increasingly (E), leaving families in many areas with nowhere to turn for help," said the bishop of Manchester, David Walker. "It cannot be right for central and local government to (F) abdicate responsibility for people in crisis when they need our help most." In many areas, the most common reason for an application for crisis support is delays or sanctions to benefits, with some councils noting that the five-week minimum wait for a first universal credit payment is an emerging factor in rising demand. Universal credit claimants facing hardship who contact Department for Work and Pensions (DWP) helplines for help are routinely directed to local welfare schemes in their areas if they do not qualify for official advance loans or hardship funds. Church leaders and anti-poverty charities called on ministers to make local welfare provision a legal duty for top-tier councils, and to provide ringfenced funding to protect crisis services. The 153 councils that responded to the survey collectively reduced

spending on local welfare by an average of 72% between 2013-2014 and 2017- 2018. (G) Local welfare provision replaced the discretionary social fund, which in its final year spent £240m in crisis loans and community care grants. (H) It was going (1) to councils with DWP funding (2) in 2013 but that cash was stopped (3) in 2015, with councils left to decide whether to keep the schemes devolved (4). Huge budget pressures faced by councils mean even authorities that have protected local welfare in the past are proposing drastic cuts. West Sussex county council recently unveiled plans for an 80% reduction in its £800,000 crisis fund from next April. (I) Local welfare has been controversially as most councils refuse to give cash payments to clients in crisis, choosing instead to offer supermarket food vouchers or refer them to food banks. In one case, Isle of Wight council offered a 62-year-old homeless woman a voucher to buy a tent. Only two English councils – Islington in north London and North Tyneside in the north-east – had higher local welfare budget cash totals year compared with 2013, by 12% and 4% respectively. Niall Cooper, the director of Church Action on Poverty, said: "The (J) of the social fund was that people could stay afloat and hopefully ride out a crisis, rather than sinking deeper into poverty. A lifeline in times of emergency is a vital part of a compassionate society, but it has been withdrawn in many places and neglected almost everywhere."

102. Which of the following word given in the options should come at the place marked as (A) in the above paragraph to make it grammatically correct and meaningful. Also, the word should fill in the two sentences given below to make them contextually correct and meaningful.

(i) She stood out of his way, barely able to care for a child and at a loss as to what to do with a boy on the …….. of becoming a teenager.

(ii) He found the country on the of revolution; but the wisdom of the new monarch saved the situation and won back the Magyars.

(a) middle (b) edging (c) verge
(d) resemble (e) terminate

103. In the passage given, a sentence (B) is given in italics. There may or may not be an error in one part of the sentence. Choose the part which has an error in it as your answer. If there in no error then choose option (e) as your answer.

(a) A survey of more than 150 council-run schemes by
(b) Church Action on Poverty found that nearly a quarter
(c) had been shutted down since 2013, while a further
(d) quarter have reduced spending by 85% or more.
(e) No Error

104. The sentence given in (C) has four words given in bold. Amongst the given bold words which of the following must replace each other to make the sentence contextually correct and meaningful.

(a) 1-4 (b) 1-3 (c) 2-3
(d) 2-4 (e) 1-2

105. Which of the following phrases should fill the blank in (D) to make it contextually correct and meaningful?

(a) facing the severe impacts caused by the crisis
(b) including job programmes and childcare, but also transfers to other state programmes,
(c) which are a cause of severe balance of payments
(d) so some avoid them by limiting how many people are eligible for welfare in the first place.
(e) such as a lack of money caused by benefit payment problems

106. Which of the following word given in the options should come at the place marked as E in the above paragraph to make it grammatically correct and meaningful. Also, the word should fill in the two sentences given below to make them contextually correct and meaningful.

(i) After living in the woods for a week without supplies, my clothing was not protecting me from the elements.

(ii) The Defence Department generally defended its existing programs, though the rationale for them was growing ……..

(a) flawless (b) threadbare (c) pristine
(d) unsullied (e) Both (b) and (c)

107. A word is given in bold in (F). Choose the word which should replace the word given in bold to make the sentence correct and meaningful. If no change is required, choose option (e) as your answer.

(a) renounce (b) abjure (c) surrendering
(d) vacating (e) No Change

108. Two sentences are given in italics on both sides of (G). Which of the following statements can come in between the two sentences in place of (G) and maintain the continuity of the paragraph?

(a) The dynamic nature of our preferred model allows to estimate the long-term effect of a 1 per cent increase in social spending, which is found to be in the order of a 0.057 points increase in the IHDI.

(b) Continuing investments in the social sectors have been recognized by the international community.

(c) Local authorities are responsible for using their funds to best meet the needs of their residents, and over the next two years we are providing them with £90.7bn to do so.

(d) Together they spent £46m on local welfare last year, compared with a national budget of £172m in 2013-14.

(e) One million people have been lifted out of absolute poverty since 2010 and household incomes have never been higher.

109. The sentence given in (H) has four words given in bold. Amongst the given bold words which of the following must replace each other to make the sentence contextually correct and meaningful.

(a) 1-4 (b) 1-3 (c) 2-3
(d) 2-4 (e) 1-2

110. In the passage given, a sentence (I) is given in italics. There may or may not be an error in one part of the sentence. Choose the part which has an error in it as your answer. If there in no error then choose option (e) as your answer.

(a) Local welfare has been controversially
(b) as most councils refuse to give cash payments to clients
(c) in crisis, choosing instead to offer supermarket
(d) food vouchers or refer them to food banks.
(e) No Error

111. Which of the following words should fill the blank given in (J) to make it contextually correct and meaningful?

(a) caused (b) occasion (c) desires
(d) purpose (e) reasons

Directions (112-115): Rearrange the following six sentences (A), (B), (C), (D), (E) and (F) in the proper sequence to form a meaningful paragraph and then answer the questions given below.

(a) With the change from traditional to industrial food processing there has also been a change in the types of product processed.

(b) In the early days of traditional food processing the main aim was preservation to maintain a supply of wholesome, nutritious food during the year and in particular to preserve it for hungry periods, for example when hunting was poor.

(c) Nowadays non-traditional crops are grown all over the world. This together with consumer demand influenced by radio, advertising and television has led to a demand for non-traditional foods that are not appropriate to the local environment.

(d) While food processing still has the main objective of providing a safe nutritious diet in order to maintain health other aspects, particularly the generation of wealth for the producer and seller, have become increasingly important.

(e) Traditional processors worked with foods that grew locally and the methods they developed were in harmony with the climate in which they lived.

(F) Only simple packaging using leaves, animal skins and pottery was possible and necessary to protect the food for its planned storage life.

112. Considering statement (D) "While food processing still has the main objective of providing a safe nutritious diet in order to maintain health other aspects, particularly the generation of wealth for the producer and seller, have become increasingly important." as the second sentence of the rearranged paragraph, then which of the following aptly expresses the theme of the paragraph after rearrangement?

(a) Benefits of non-traditional food processing
(b) Reforms in food processing
(c) Harmful effects of processed foods
(d) Objective of processing foods
(e) None of these

113. Considering statement (D) "While food processing still has the main objective of providing a safe nutritious diet in order to maintain health other aspects, particularly the generation of wealth for the producer and seller, have become increasingly important." as the second sentence of the rearranged paragraph, then which among the following should be the FOURTH sentence of the rearranged paragraph?

(a) A (b) B (c) E
(d) F (e) C

114. Considering statement (D) "While food processing still has the main objective of providing a safe nutritious diet in order to maintain health other aspects, particularly the generation of wealth for the producer and seller, have become increasingly important." as the second sentence of the rearranged paragraph, then which among the following should follow the last sentence after the rearrangement?

(a) They need special processing and packaging to protect them for their required storage life.
(b) The increasing number of women who now work away from home adds additional pressure for such changes.
(c) Food has been processed and packaged since the earliest days of man's history on earth.
(d) The small-scale food processing sector is a major source of employment.
(e) None of these

115. Considering statement (D) "While food processing still has the main objective of providing a safe nutritious diet in order to maintain health other aspects, particularly the generation of wealth for the producer and seller, have become increasingly important." as the second sentence of the rearranged paragraph, then which among the following should coherently link the first and the second sentence of the paragraph, without altering the context of the paragraph?

(a) The small-scale food processing sector adds value to crops by processing.
(b) Food and crop processing is generally considered to be the largest industry in most countries.
(c) The powerful large-scale food sector is also often able to influence government and international policies.
(d) Food was seldom sold but traded and bartered.
(e) None of these

Solutions

REASONING ABILITY

Directions (1-3); In this input output question only numbers is arranged in each step. Let us understand the logic behind it-
In each step the numbers are arranged
In step 1: all the even number (input) are multiplied with 2 and all the even numbers are multiplied with 3.
Step 2: Is given in the pattern as firstly the numbers are subtracted and then added respectively.
Step 3: The resultant of the multiplication of its digits in the previous step.
Step4: The numbers in the previous step is divided by 2.

Input-	25	22	93	56	17	74	39
Step1-	75	44	279	112	51	148	117
Step2-	31	323	167	163	97	265	
Step3-	3	18	42	18	63	60	
Step4-	1.5	9	21	9	31.5	30	

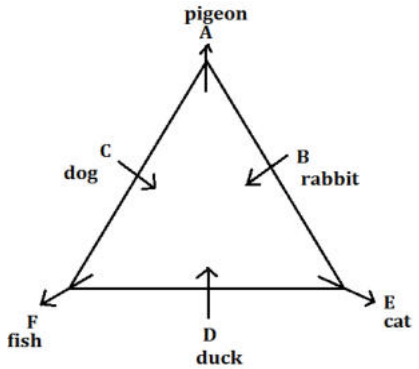
1. (b); 2. (c); 3. (a);

Directions (4-8):

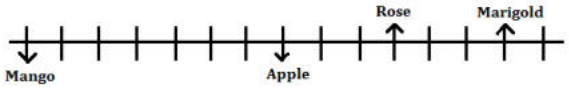
Person	Birth year	Age	Fruit
Viraj	1938	80	Banana
Anko	1959	59	Grapes
Charu	1962	56	Cherry
Tarun	1983	35	Orange
Monika	1995	23	Mango
Vishakha	2000	18	Apple

4. (e); 5. (e); 6. (c);
7. (e); 8. (a);

Directions (9-10):



9. (e);
10. (d);
11. (a);



12. (d);

Person	Item
L	Chair
G	Wallet
K	Bag
A	Perfume
S	Table

Directions (13-15):
Input: **$ F 3 6 N @ 9 K T Q 5 C % 8 B # 7 D S * H 4 W L**
Step I: **$ F 3 6 N @ K T Q 5 C % B # D S * H 4 W L 7 8 9**
Step II: $ 3 F 6 N @ K T 5 Q C % B # D S * H 4 W 7 L 8 9
Step III: $ 3 F 6 @ K T 5 Q % # D * H B C N S 4 W 7 L 8 9
13. (c);
14. (c);
15. (b);
Directions (16-20):

Floor	Flat A	Flat B
3	3 Rooms	4 Rooms
2	6 Rooms	9 Rooms
1	8 Rooms	2 Rooms

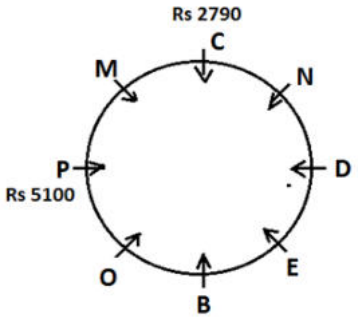
16. (c); 17. (d); 18. (c);
19. (a); 20. (d);

21. (b); Course of action I follows because with a graded approach to the use of antibiotics, under which some medicines are reserved for the most resistant microbes, the WHO list can stop their misuse as broad-spectrum treatments. Course of action II also follows because a close inspection is also needed of the national supervisory programmes to help people to get rid out of it.

22. (c); Statement (i) and (ii) states a fact that supports this buying frenzy being carried out by aviation companies. Whereas (iii) clearly mentions that lack of infrastructure will be a major challenge that aviation companies might have to face in future.

23. (e); (i) states a fact that this test will determine the future career of the students and thus have a significant importance for them. The fact that parents are spending a lot of money to ensure the comfort of their children and the students spending money on supplements signifies the importance of this test, So (ii) and (iii) substantiates the statement.

Directions (24-27):



24. (b);
25. (a);
26. (d);
27. (d);
28. (c); (i) is not an appropriate course of action as it not known from the statement weather the protest are violent or peaceful. (ii) is preventive measure not a corrective action. As it is mentioned in the statement that the given state has faced several drought like situations over the recent years, so (iii) is an appropriate course of action.

Directions (29-33):

Months	Person	Days
January	D	31
February	A	26
March	G	11
April	C	3
May	E	21
June	B	27
July	F	8

29. (d); **30. (a);** **31. (d);**
32. (b); **33. (a);**

34. (a); (i) "However a new study" implies that there might have been some studies regarding this in the past and "proven to be healthy". So, (i) is definitely true. (ii) cannot be deduced as smoking is not mentioned in the statement. (iii) is vague and not in context with the statement.

Direction (35-36):
35. (d); Five person attend meeting before D.

Monday	C
Tuesday	B
Wednesday	
Thursday	A
Friday	
Saturday	D

36. (d);

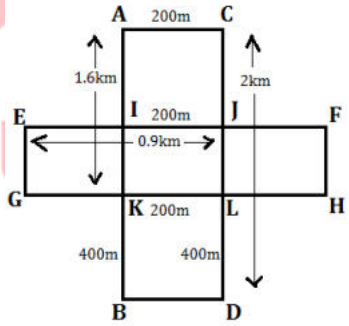
37. (e); All the given statements are the examples of Promos Marketing as all examples clearly support the fact that people prefer those products they are more familiar with as they built a trust in it so they used to buy it again.

38. (d); For (a), Raw material plays an important role in production of a product and adequate funds are also required for it but there are alternatives available for it such as lo to fulfill the requirement so (a) is not the most possible reason. Employee satisfaction and proper machinery plays a vital role in growth of the company but again both of these can be replaced or modified. So, (b) and (c) do not follow. Statement (e) is vague. So, the most possible reason is (d) as the demand has been declined from past 5 years hence the production also declined.

39. (d); Only (d) can be inferred from the given statement as the given statement suggest that the victory of Trump is more a revenge against the corrupt ones and moreover Trump was more focusing on working class public's issue whereas Hillary was more concerned on fascinating people by famous personalities.

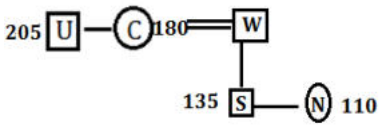
40. (d); Only IV, is incorrect as it is mentioned in above statement that green crackers are cost effective whereas the (IV) statement states that green fire crackers are quite expensive.

41. (d);

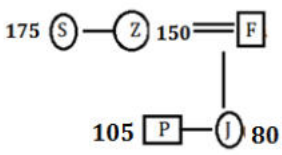


42. (d); From (a) FILM
(b) GLOW
(c) MOUSE

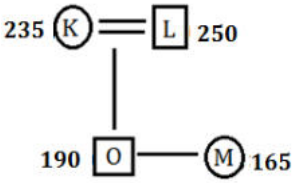
43. (e); (i);



(ii);



(iii);



44. (d); Statement (II) is true as the psychological and emotional quotient of human beings can only be the reason of less spending of second group as compared to the first one.

45. (b); The statement which is bold is the effect and the one which is italic is cause. As the demands of the employees of Delhi metro is the cause and the strike is the effect.

QUANTITATIVE APTITUDE

46. (d); Let width of the path = x cm
So, length of the park will be = (x + 4) cm
So,
$\frac{4}{3} \times$ (Area of path) = Area of the park
$\Rightarrow \frac{4}{3}[x(x+4) - (x-4)(x+4-4)] = x(x+4)$
From this equation we can find out the value of x and hence all value can be find out.

47. (d); Let C invested for t days

A		B		C
1200×12	:	2400×4	:	xt

And,
1200 × 12 = xt
Here, x will depend on t and value of t can be maximum 8 month and minimum 1 months
On putting t = 8
X = 1800
Putting t = 6
x = 2400
on putting t = 4
x = 3600
on putting t = 2
x = 7200

48. (e); Let x men do the work in (a – 6) days
And y women do the work in a days
So,
x(a − 6) = y(a)
From (i)
Let x= 5p
And y = 6p
5p(a – 6) = 6p(a)
5a – 30 = 6a
a = -30 not possible
From (ii),
10p(a – 6) = 3p(a)
10a – 60 = 3a
7a = 60
$a = \frac{60}{7}$ it is possible
From (iii)
8p (a – 6) = 5p(a)
8a – 48 = 5a
3a = 48
a = 16 possible
From (iv)
10p (a – 6) = 7p (a)
10a – 60 = 7a
a = 20 possible
So, (ii), (iii) and (iv) are possible

49. (d); Let total population of village A in 2000, 2008 and 2012 be 200x, 300x and 400x respectively
So,
$\frac{40}{100} \times 200x + \frac{50}{100} \times 300x + \frac{60}{100} \times 400x = 1410 \times 3$
470x = 1410 × 3
x = 9
Required population = 9 × 200 = 1800

50. (d); Let population of village C in 2000, 2008 and 2012 be (x + 2n), (x + n) and x respectively
So,
$\frac{50}{100}(x+n) = \frac{70}{100}(x)$
5x + 5n = 7x
$2x = 5n \Rightarrow n = \frac{2}{5}x$
Required percentage = $\frac{x+2n-x}{x+2n} \times 100$
$= \frac{2\times\frac{2}{5}x}{\frac{9}{5}x} \times 100 = 44\frac{4}{9}\%$

51. (a); Sum of literate from B in 2000 and 2008 = 1530
Sum of literate from B in 2008 and 2012 = 2010
And sum of liteate from B in all years = 2490
So, literate in 2008 = (1530 + 2010) – 2490 = 1050
Let population of B in 2008 be x
So,
40% of x = 1050
x = 2625

52. (e); From (i) & (ii),
Let, HCF be x
then LCM is 44x
$44x + x = 540 \Rightarrow x = \frac{540}{45} = 12$
From (iii), A + B = 10K
Let, A = 12a & B = 12b
Then A + B = 12 (a + b), where a & b are coprime.
Also, a × b = 44
Possible values of a and b are (4, 11) or (1, 44)
Sum of A + B = 12 (4 + 11) = 180
Or A + B = 12 (1 + 44) = 540
So, questioned can't be answered even after including all the statements.

53. (d); Let A litres is removed and B litre of water is added to the mixture
Initially, Ratio of milk and water is 5 : 1.
ATQ,
$200-\frac{5}{6}A = 40-\frac{A}{6}+B+125$
$\Rightarrow 105 = 2A + 3B$
Among the options only A, B and D satisfy this eqn.

54. (b); Let number of red, green and blue ball be x, y and z respectively
ATQ,
$x - y = y - z$
$y = \frac{x+z}{2}$ or $2y = x + z$
And $\frac{z}{x+y+z} > 0.2$
$\frac{z}{3y} > \frac{1}{5}$
$5z > 3y$
If y = 5, then z > 3
If y = 10, then z > 6, but this isn't possible
Hence,

Red	Green	Blue
6	5	4
4	5	6
3	5	7
2	5	8
1	5	9

5, 5, 5 isn't possible as number of balls is different
Hence, from given options only (b), (d) and (e) can be the answers.
So, option, Only (b), (d) and (e) is our correct answer.

55. (c); Let CP = 100 & MP = 160
From A
If profit = 60%
Hence no discount is possible here so, it is not satisfy equation
From B
When profit is 20% then discount will be $\frac{40}{160} \times 100$ = 25%
When it doubles i.e. discount = 50%
Then, $SP = 160 - \frac{50}{100} \times 160 = 80$
So, it gave loss of 20% not possible
From C
When profit = 48%
Then discount $= \frac{12}{160} \times 100 = 7.5\%$
When it doubles = 15%
Then $SP = 160 - \frac{15}{100} \times 160 = 124$
So, profit is 24%
So, option C is possible
From D
When profit = 36%
Discount $= \frac{24}{160} \times 100 = 15\%$
When discount gets doubled = 30%
$SP = 160 - \frac{30}{100} \times 160 = 112$
So profit is 12%, hence possible
From E
When profit = 44% = 10%
When discount = 20%
$SP = 160 - \frac{20}{100} \times 160 = 128$
Profit is 28%
So, it is possible
Then C, D and E values are possible

56. (d); Let first and fifth numbers be '2x' and '2a' respectively.
Then, third number (A) = $\frac{2x+2a}{2}$ = x + a
Second number = $\frac{2x}{2}$ = x

2x	x	x+a	62	2a

ATQ,
2x + x + x + a = 127
4x + a = 127
From option (a) x + a = 64
$\Rightarrow 3x = 63$
$\Rightarrow x = 21$
Average of five numbers = $\frac{42+21+64+62+2(64-21)}{5} = 55$
According to this, option (d) 64, 55 is our correct answer.

57. (b); Let income of 'D' and 'E' is x and y respectively.
We have to find the value of 'x – y'.
From (I)
0.72x – 0.5y = 3200
From (II)
0.4x – 0.4y = 8000
$\Rightarrow x - y = \frac{8000}{0.4} = 20000$
Hence, only (II) is sufficient to answer the question.

58. (e); Let Rs C's income is Rs x
Atq,
$\frac{0.44x+0.52x}{2} = 19200$
$\Rightarrow x = \frac{2\times19200}{0.96} = 40{,}000$
A's income = 1.2 × 40,000 = 48,000
A's expense in the month of November
$= \frac{60}{100} \times 48000 = Rs\ 28800$

59. (d); Let, income of B is Rs x
From (I)
0.6x – 0.4x = 16000
$\Rightarrow x = \frac{16000}{0.2} = 80{,}000$
Amount invested by 'B' is PPF
$= 80{,}000 \times \frac{40}{100} \times \frac{37.5}{100}$ = Rs 12,000
From (II)
0.6x – 0.4x = 16000
$\Rightarrow x = \frac{16000}{0.2} = 80{,}000$
Amount invested by 'B' in PPF
$= \frac{37.5}{100} \times \frac{40}{100} \times 80{,}000 = Rs\ 12000$
Hence, Either statement **(I)** or statement **(II)** by itself is sufficient to answer the question.

Solution 60-62

Village	No. of wind mills	Maximum units produced	No. of houses	Wind mills operative			
				Week1	Week 2	Week 3	Week 4
A	24	2 lakh/week	540	75%	50%	75%	100%
B	20	80000 /week	240	50%	75%	100%	50%
C	15	1 lakh/week	150	40%	60%	80%	60%
D	12	1.5 lakh/week	350	75%	50%	50%	75%

60. (b); Number of mills operative in week 1 of village A
$= \frac{75}{100} \times 24 = 18$
Level 1 (upper limit) of efficiency range 2 means 55%
Total units produced in village A in first week when operated at level 1 of efficiency range 2
$= 18 \times \frac{55}{100} \times 2$
Similarly,
Number of mills operative in village B in week 2
$= \frac{75}{100} \times 20 = 15$
$level$ 2 (mid limit) of efficiency Range 1 $= \frac{60+70}{2}\%$
= 65%
Total units produced in village B in week 2 when operated at level 2 of efficiency range 1
$= 15 \times \frac{65}{100} \times .8$
Required ratio $= \frac{18 \times \frac{55}{100} \times 2}{15 \times \frac{65}{100} \times .8} = 33 : 13$

61. (b); Mills operating in village C in week second and fourth is $= \frac{3}{5} \times 15$ and $\frac{3}{5} \times 15$ respectively.
Total units produced at level 1 of efficiency range 1
$= (9 + 9) \times 100,000 \times \frac{70}{100}$
$= 18 \times 1000 \times 70 = 1260000$
Mills operating in village A in first and fourth week is $24 \times \frac{3}{4}$ and 24 respectively
Total units produced at level 2 of efficiency range 1
$= (18 + 24) \times 200000 \times \frac{65}{100}$
$= 42 \times 2000 \times 65$
= 5,460,000 units
Required percentage $= \frac{126}{546} \times 100 = 23\frac{21}{273}\%$

62. (e); No. of mills operating in B in fourth week $= 20 \times \frac{50}{100}$
= 10
Total units consumed at level 3 of efficiency range 3 per house $= \frac{10 \times 80000 \times 30}{240 \times 100} = 1000$ units/house
No. of mills operating in C in second week
$= 15 \times \frac{60}{100} = 9$
Total units consumed at level 1 of efficiency range 2
$= \frac{9 \times 1,00000}{150} \times \frac{55}{100} = 3300$ unit/house
Required ratio = 10 : 33

63. (b); Quantity I $= \frac{360}{120} \times 24.m^{7+2-4}.n^{9-3+4} = 72.m^5.n^{10}$
If m>0, n< 0, then Quantity I > 0
Quantity II $= \frac{240}{60 \times 3} x^{9-4+2} y^{7-3-3} = \frac{4}{3}x^7y$
If x < 0, y < 0, then quantity II > 0
Quantity III $= \frac{48 \times 5}{6} a^{8+3-6}.b^{(12-4-1)} = 40a^5b^7$
If a > 0, b < 0, then Quantity III < 0 .
∴ Relation between Quantity I and Quantity II can't be established but Quantity II > Quantity III
∴ (#, @) is our correct answer.
Quantity I > Quantity II = Quantity III

64. (d); **Quantity I:** $\frac{(p+n)^2-(p-n)^2}{8pn(p+n)^2} = 1$
$\frac{p^2+n^2+2pn-(p^2+n^2-2pn)}{8pn(p+n)^2} = 1$
$\frac{4pn}{8pn(p+n)^2} = 1 \Rightarrow \frac{1}{2} = (p+n)^2$
$p = \frac{1}{\sqrt{2}} - n$
Quantity II: $\frac{(q+n)^3-(q-n)^3}{(n^2+3q^2)^2} = \frac{1}{8n}$
$\frac{q^3+n^3+3q^2n+3n^2q-(q^3-n^3-3q^2n+3n^2q)}{(n^2+3q^2)^2} = \frac{1}{8n}$
$\frac{2n^3+6q^2n}{(n^2+3q^2)^2} = \frac{1}{8n} \Rightarrow \frac{2n(n^2+3q^2)}{(n^2+3q^2)^2} = \frac{1}{8n}$
$16n^2 = n^2 + 3q^2 \Rightarrow q = \sqrt{5}n$
Quantity III: $\frac{\sqrt{r+n}+\sqrt{r-n}}{\sqrt{r+n}-\sqrt{r-n}} = 2$
$\sqrt{r+n} + \sqrt{r-n} = 2(\sqrt{r+n} - \sqrt{r-n})$
$3\sqrt{r-n} = \sqrt{r+n} \Rightarrow 9(r-n) = (r+n)$
$8r = 10n \Rightarrow r = \frac{10n}{8} = 1.25n$
Quantity I < Quantity II > Quantity III

65. (c); **Quantity I –** Probability of at most two students will solve the question
= 1 – probability of all three students will solve the question
$= 1 - (0.5) \times (0.6) \times (0.3)$
= 1 – 0.09 = 0.91
Quantity II – Total balls = 5 + 7 = 12
Probability of getting at least 1 green ball = 1 − probability of no green
$= 1 - \frac{7}{44} = \frac{37}{44} \approx 0.84$
Quantity III –
$P\ (Arun\ speak\ truth) = \frac{4}{5}$
$P\ (Bhavya\ speak\ truth) = \frac{6}{7}$
Required probability
$= \frac{4}{5} \times \frac{1}{7} + \frac{1}{5} \times \frac{6}{7} = \frac{10}{35} = \frac{2}{7}$
≈ 0.28
Quantity I > Quantity II > Quantity III

66. (e); Atq,
$S = \frac{D}{T}$ ...(i)
$(S + 10) = \frac{D}{T-2}$ ...(ii)
$(S - 15) = \frac{D}{T+6}$ ...(ii)
On solving (i), (ii) & (iii)
D = 400 km, S = 40 km/hr. T = 10 hour
Statement 1, 2 and 4 can be found out from the given data but statement 3 can't be solved as length of tunnel is not given.

67. (c); Let length of train A be (x + 100) m
So, length of train B be x m
$(2x + 150) = (54 + 81) \times \frac{5}{18} \times 12$ m
$= 135 \times 5 \times \frac{2}{3}$ m = 450 m
x = 150 m
Length of train A = 250 m
Length of train B = 150 m
(i) Cannot be obtained because speed of man is not given
(ii) Can be obtained
$t = \frac{(250+175)}{81\times\frac{5}{18}} = \frac{425}{81} \times \frac{81}{5}$
$\Rightarrow \frac{170}{9}\ sec$
(iii) it has already obtained
(iv) can't be obtained because no other condition regarding C has been given
Hence only (ii) and (iii) can be find out.

68. (b); Let the original number by xy
According to given condition
$(10x + y) > 3(10y + x)$
$7x - 29y > 0$
On putting y=1
X has to be more than or equal to 5
So for y = 1,
Possible values for x are 5 , 6, 7, 8 ,9
So, 5 numbers are possible when y is 1
(51), (61), (71), (81), (91)be
On putting y = 2
X has to be 9
So 92 is another number
Values greater than 2 are not possible for y.
If we take y = 3 than x has to be 13 which is not possible
So there are 6 possible numbers.

69. (c); $\frac{2R}{100} \times 10000 = 1400$
R = 7%
Now for x = 1
R = 8% for CI
Equivalent CI at rate of 8% for 2 yrs = $8 + 8 + \frac{64}{100}$
= 16.64%
CI at 8% for 2 yr = $\frac{16.64}{100} \times 11400 = 16.64 \times 114$ Rs
Approximately = $\frac{33}{2} \times 114$
$= 33 \times 57 = 1881$
For 9%
CI = $\frac{18.81}{100} \times 11400 = 18.80 \times 114$
Approx. = $19 \times 114 = 2166$
For 10% = $\frac{21}{100} \times 11400$
$= 21 \times 114 = 2394$
So, 3 values of x are possible i.e, 1, 2 and 3.

70. (b); Let marked price of article A and B be 400x and 500x respectively
ATQ—
$400x \times \frac{(100-d)}{100} = 500x \times \frac{(100-d-18)}{100}$
$400 - 4d = 410 - 5d$
d = 10%
Cost price of article A = $\frac{400x\times\frac{90}{100}}{120} \times 100 = 300x$ Rs.
Cost price of article B = $\frac{500x\times\frac{(100-28)}{100}}{125} \times 100 = 288x$ Rs.
ATQ—
$\left(500x \times \frac{72}{100} - 288x\right) - \left(400x \times \frac{90}{100} - 300x\right) = 384$
$72x - 60x = 384$
x = 32
Cost price of article A = 32×300 = Rs.9600
Cost price of article B = 32×288 = Rs.9216

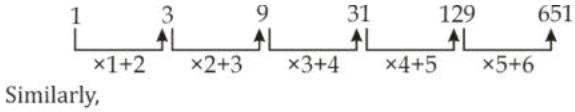
71. (b); Efficiency of tap = 250 L/h
In November there are total 30 days.
Total flats = 20
Let tank is refilled n times
So,
$n \times 600000 = 250 \times 24 \times 30 \times 20$
n = 6 hours

72. (d); Total time in which tank gets emptied
$= \frac{25}{6} \times 24 = 100$ hours
So, Rate of flow = $\frac{600000}{30\times100} = 200$ L/hour
A% = $\frac{250-200}{250} \times 100 = 20\%$

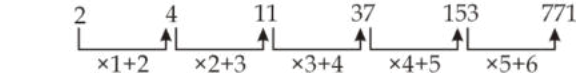
73. (d); Let n number of flats were occupied
$x \times 250 \times 100 = 600000$
x = 24 flats
B% = $\frac{24}{40} \times 100 = 60\%$

74. (e); Efficiency of a tap in October = $\frac{4}{5} \times 250 = 200$ l/hour
New capacity of the tank = $\frac{4}{5} \times 600000 = 480000$ l
Occupied flats in October = 30
Required time = $\frac{480000}{200\times30} = 80$ hours

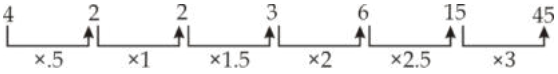
75. (d); Pattern of the series is,



Similarly,



76. (c); Pattern of the series is



So, next terms will be 45 × 3.5, 45 × 3.5 × 4, 45 × 3.5 × 4, 4.5

Do not calculate exact values. Just calculate approximate values because with increase in values next term will be for away from 2835

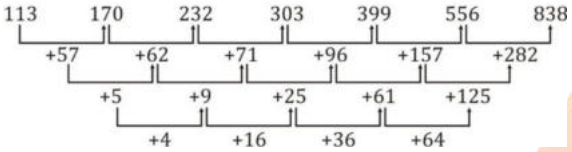
So, 45 × 3.5 is approx. 150

And, 150 × 4 is approx. – 600

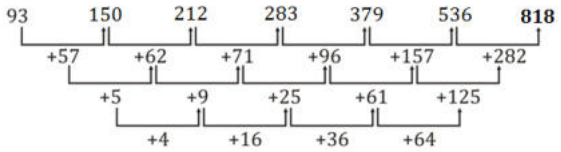
600 × 4.5 is approx. × 2700

So, multiples of 4.5 is nth term which is 10th term.

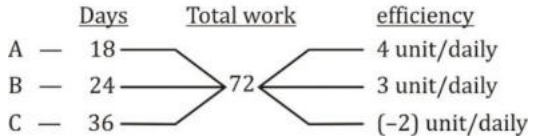
77. (d);



Second series



78. (e);



ATQ—

$(A + B)x + (A + B - C)\left(\frac{5x+24}{5}\right) = 72$

$7x + 5\left(\frac{5x+24}{5}\right) = 72$

$12x = 48$

$x = 4$

(A + B + C) work for

$= 4 + 4\frac{4}{5} = 8\frac{4}{5}$ days

79. (c); Speed of current $= \frac{5}{9} \times \frac{18}{5} = 2$ km/hr

Let's still water speed = x km/hr

ATQ,

$\frac{28\times\frac{3}{4}}{(x-2)} - \frac{28}{(x+2)} = 3$

$21x + 42 - 28x + 56 = 3x^2 - 12$

$-7x + 98 = 3x^2 - 12$

$3x^2 + 7x - 110 = 0$

$x = 5$ km/hr

80. (e); Volume of cylindrical vessel $= \frac{22}{7} \times 17.5 \times 17.5 \times 18$

$= 17325$ cm^3

Volume of milk $= 17325 \times \frac{80}{100} = 13860$ cm^3

$30 \times 7 \times 3 \times h = 13860$

$h = \frac{462}{21} \Rightarrow h = 22$ cm

ENGLISH LANGUAGE

81. (b); The first paragraph of the passage is about the ways to establish a consistent saving habit through various ways and the second paragraph further gives a smarter way to save through the use of certificates of deposit (CDs). Hence, option (b) is the correct theme of the passage.

82. (b); 'Even' will be the correct word to replace 'yet'.

83. (c); The tone of writing in the passage is Didactic because the author tries to teach or instruct through his writing.

84. (d); Before the blank it is given that CDs usually offer higher interest rates, which is a positive phrase. Further, 'but' is used which means that next part of sentence will be something contradictory. Hence, 'penalties' will the correct word.

85. (c); The correct chronology of steps is Budgeting-Saving-Investment.

86. (b); The paragraph deals with improving savings and limiting expenses. 'Curtail' means reduce in extent or quantity; impose a restriction on. So, 'curtail' should replace 'increase'.

87. (c); The correct way of writing the line without changing its intended meaning is 'Make sure that the income is greater than the expenses by a margin as wide as possible.'

88. (a); The paragraph tells about the better ways to save and what all should be considered while spending or maintaining your expenses. So, the statement in option (a) can be the best inference from the passage.

89. (d); 'Moneywise' here means in regard of money and so it is the perfect fit for the blank.

90. (d); "Expenses or needs that have to be met at a point of time in the future are called goals." This will be the last line in continuation to the last line of the passage as the last line is an example to set aside money to buy a watch in the future.

91. (b); Let's read the clause 'Pakistan's Army and political leadership are on "one page" to take dialogue with India forward". What is the need for mentioning the clause? Could political leadership of Pakistan independently take dialogue with India forward, why had the clause been mentioned?

It means that the statement (III) is a wrong assumption.

In Pakistan, to take dialogue with India forward, there must be consensus between the Pakistan's Army and the political leadership of Pakistan.

Only the statement (I) is the correct assumption to be drawn. Hence, the option (b) is the correct answer.

92. (a); Option (a) is the correct answer.
Let's re-read the sentence where the given reference was made.
'Mr. Khan also struck a discordant note Kashmir, referring to the dispute as the "single issue" between India and Pakistan.'
Had there been more than one unresolved issue between India and Pakistan, then Mr. Khan wouldn't have referred to the Kashmir dispute as the "single issue" between India and Pakistan.
It means that according to Mr. Khan, there is one and only one unresolved issue between India and Pakistan.
Hence, the option (a) is the correct answer.

93. (d); 'Discordant' [adjective] means 'disagreeing or incongruous'; Clashing [adjective] means 'in conflict with each other; incompatible'; Concurred means 'be of the same opinion; agree';
Accord means 'give or granting someone power';
Endorsement means 'the action of endorsing someone or something';
Among the given options, the option (d) is the correct answer.

94. (b); The answer to the question can be derived from the last paragraph where it is given that 'airlines were allowed to unbundle fares and charge separately for preferential seating, meal-on-board, check-in baggage and use of airline lounges'. Only option (b) mentions this.
There is no mention of any information given in the options (a) and (c) in the passage. So, the option (b) is the correct answer.

95. (e); The statement (I) says that keeping web check-in free would help in keeping the number of passenger in an airport and would help security personnel in the security management. This is a very good motivation for the government to convince the airlines to take back the said fees.
The statement (II) says that levying fee to web check-in would make air-travel costly, might discourage people to opt for air travel and would be in contradiction to the aspiration of the government to increase the overall number of air-travel passengers. Because the government wants to increase the overall number of air-travel passengers and levying web check-in fees might decrease that number. So, the government would be encouraged to stop this.
In the statement (III), the government wants that people use internet or digital means to avail important services in an increasing number. But levying web-check-in fees would discourage passengers to opt for it and would be against the objective of the Digital India Initiative. So, the government would be encouraged to stop this.
So, the information present in (I), (II) & (III), if true, would encourage the government to stop air lines to levy web check-in fees.
Hence, the option (e) is the correct answer.

96. (e); 'Withdraw' [verb] means 'discontinue or no longer provide (something previously supplied or offered)';
Abolish [verb] means 'do away with or put an end to';
Rescind [verb] means 'declare null and void';
From above, it could be understood that the word 'approve', option (e), has a meaning which is SIMILAR to the meaning of the word 'approve'.
Hence, the option (e) is the correct answer.

97. (c); The phrase 'dark chapter' usually mean something that shouldn't have happened, meaning the events caused regret, sadness of an extremely high extent.
Among the given options, only option (c) clearly indicate the correct meaning of the phrase. Hence, the option (c) is the correct answer.

98. (b); The Delhi High Court expressed her opinion about the manner of prosecution of the anti-Sikh riots in the last paragraph.
The meaning of the word 'emulate' is 'Match or surpass (a person or achievement), typically by imitation'; imitation.
'Not emulate' would mean 'not to imitate'.
According to the Delhi High Court, the manner in which prosecution of the 1984 anti-Sikh riots has been going on must never be emulated'.
The option (b) is saying the same thing and hence, option (b) is the correct answer.

99. (d); Absconded [abscond, verb] means 'leave hurriedly and secretly, typically to escape from custody or avoid arrest';
Emulated [emulate, verb] means 'match or surpass (a person or achievement), typically by imitation'; imitate;
From above, it could be understood that the word 'escaped' conveys a meaning which is SIMILAR to the word 'absconded'.
Hence, the option (d) is the correct answer.

100. (e); Justice Kurian Joseph said that the courts had been imposing the death penalty "arbitrarily and freakishly". If courts are imposing penalty "arbitrarily and freakishly", then it would mean that the courts have failed to uphold the principle of justice.
Among the three judges, Justice Kurian Joseph, Justice Deepak Gupta and Justice Hemant Gupta, Justice Kurian Joseph said that courts had been imposing the death penalty "arbitrarily and freakishly" but the other two judges, Justice Deepak Gupta and Justice Hemant Gupta, disagree that death penalty was "freakishly" imposed.
So, among the three judges mentioned in the passage, only Justice Kurian Joseph believes that courts have failed to uphold the principle of justice.
Hence, the option (e) is the correct answer.

101. (d); Disagreed [disagree, verb] means 'have or express a different opinion';
Haggled [haggle, verb] means 'dispute or bargain persistently, especially over the cost of something';
Bickered [bicker, verb] means 'argue about petty and trivial matters';
Contended [contend, verb] means 'compete with others in a struggle to achieve (something)'; 'assert something as a position in an argument';
Concurred [concur, verb] means 'be of the same opinion; agree';

Feuded [feud, verb] means 'a prolonged and bitter quarrel or dispute';
From above, it could be understood that the word 'concurred' has a meaning which is SIMILAR to the meaning of the word 'disagreed'.
Hence, the option (d) is the correct answer.

102. (c); 'Verge' means an extreme limit beyond which something specified will happen. So, 'verge' is an appropriate choice here.

103. (c); Error is in the part given in option (c). 'shut' is to be used in place of 'shutted'. There is no such word as 'shutted' in English dictionary. Further, 'has been' takes third form of verb and third form of 'shut' is 'shut' itself.

104. (a); 'destitution' and 'demise' should replace each other. 'Demise' means the end or failure of an enterprise or institution.
'Destitution' means poverty so extreme that one lacks the means to provide for oneself.

105. (e); 'such as a lack of money caused by benefit payment problems' is the correct phrase her. the preceding statement talks about hardships and this phrase explains the type of hardship, thus maintaining the continuity of the sentence.

106. (b); 'Threadbare' means (of an argument, excuse, idea, etc.) used so often that it is no longer effective. Also, it means poor or shabby in appearance. So, threadbare fits in all the sentences correctly.

107. (e); No Change. 'Abdicate' means fail to fulfill or undertake (a responsibility or duty). Hence, it is correct in context of the sentence.

108. (d); The correct option is (d) 'Together they spent £46m on local welfare last year, compared with a national budget of £172m in 2013-14.' As the previous statement is about the councils spending on local welfare and the statement in (d) also discusses their collective spending. Hence, it is the correct choice.

109. (a); 1 and 4 should replace each other. 'Going' and 'devolved' should replace each other to make the sentence correct. 'Devolve' means transfer or delegate (power) to a lower level, especially from central government to local or regional administration.

110. (a); Error is in the part given in option (a). An adjective is to be used here so 'controversial' should be used in place of 'controversially'

111. (d); 'Purpose' is the most appropriate word here.

112. (b); The logical sequence of the sentences after the rearrangement is BDAEFC. Drawing a hint from the second statement, it can be illustrated that the paragraph is providing information on processed foods. If we carefully understand and arrange the other sentences we will articulate that the paragraph is describing about the changes the world has seen from traditional to industrial food processing. However, the paragraph does not mention anything about its benefits, harmful effects or objectives. Hence, option (b) "Reforms in food processing" becomes the most suitable answer choice.

113. (c); Drawing a hint form the second sentence, it can be illustrated that the paragraph is providing information on processed foods. If we carefully understand and arrange the other sentences we will articulate that the paragraph is describing about the changes the world has seen from traditional to industrial food processing. Thus, sentence (B) perfectly stands as the starter of the rearranged paragraph as it is describing about the objective or aim of food processing in the earlier days. Therefore, it coherently links with the second sentence (D) which states the broaden objectives of food processing. Sentence (A) should take the third position as it is contextually related with the previous statement which indicates a change in the food processing industry. Similarly, sentence (E) and (F) forms a coherent pair as they have mentioned about food processed and practices followed by traditional processors. Next comes, the concluding sentence (C) as it sums up the comparison by providing information on the non-traditional crops grown all over the world and how the demand for these products has increased. Hence, the logical and comprehensive sequence of these sentences after the rearrangement is BDAEFC. Therefore, sentence (E) becomes the fourth sentence in the sequence, and option (c) becomes the most viable answer choice.

114. (a); The logical sequence of the sentences after the rearrangement is BDAEFC. The last sentence i.e. sentence (C) of the paragraph describes about the changes in the food processing industry. It has also mentioned about the production of the non-traditional crops around the worlds and their rising demand due to mass communication. Thus, it becomes difficult for such products to survive in the local environment. Complying with the given context, option (a) perfectly complements sentence (C) as option (a) has described about the protection of these products to enhance their storage life. All the other options are either irrelevant to the context or fail to adhere to the theme of the paragraph. Hence, option (a) is the most suitable answer choice.

115. (d); The logical sequence of the sentences after the rearrangement is BDAEFC. In order to add a sentence after the first sentence without altering the context of the paragraph, both the sentences should be analyzed. Sentence (B) perfectly stands as the starter of the rearranged paragraph as it is describing about the objective or aim of food processing in the earlier days. Therefore, it coherently links with the second sentence (D) which states the broaden objectives of food processing which is about generation of wealth for the producers as well as sellers. This implies that earlier this wasn't one of the objectives of food processing. Thus, option (d) perfectly links sentences (B) and (A) as it mentions about the trading of processed foods through barter system in the earlier days. Thus, the new sequence would be B (d) DAEFC. All the other options are either irrelevant to the context or fail to adhere to the theme of the paragraph. Hence, option (d) is the most suitable answer choice.

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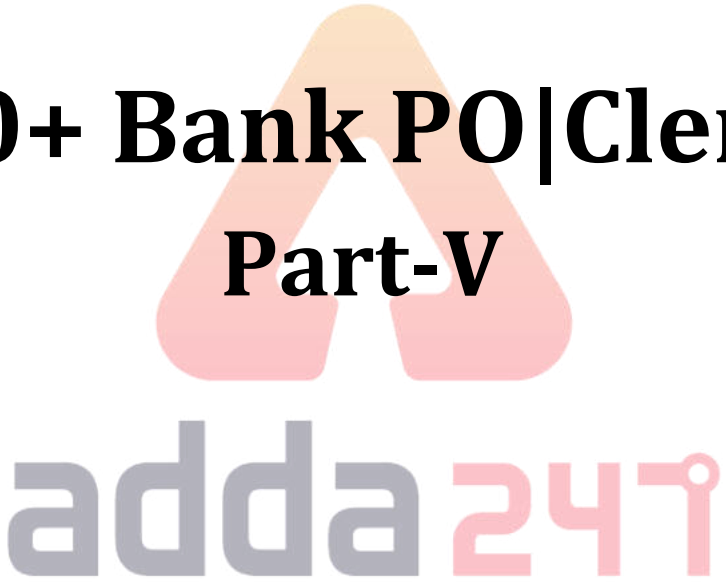
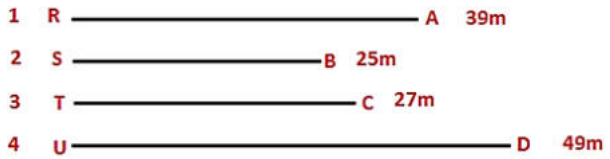


REASONING ABILITY

Directions (1-5): Study the following information carefully and answer the questions that follow:



In the given figure the four-line segments 1,2,3,4 are RA, SB, TC, UD respectively. The lengths of the line are 39m,25m,27m and 49m respectively.
Six people Mohan, Sohan, Rohan, Ankit, Vinit and Sumit are standing in line 1-RA. All of them are facing north. With distance between them increasing in multiples of 7 from the left end (i.e. suppose Mohan is left end of the line at point R then the remaining people will stand at a distance as follows -7m, 14m, 21m…. from the end)
Mohan is standing at the left end of the line. Two persons are standing between Mohan and Sohan. Rohan stand second to the left of Sohan. Sumit is an immediate neighbor of Rohan. Only one person stands between Sumit and Ankit.
Similarly, six people Anita, Ambika, Amrita, Aanchal, Arpita and Ajita are standing in line-4 UD. All of them are facing south. with distance between them increasing in multiples of 9 from the end (i.e. if first person is at right end of the line at point U and the remaining will be stand at the distance as follows-9m, 18m,27 m…. from point U).
Amrita is standing at 3rd position from the right end. Arpita is an immediate neighbor Of Amrita. Two people are standing between Arpita and Ajita. More than three persons stand between Ajita and Anita. Aanchal stands to the immediate left of Ajita. Ambika and Arpita are immediate neighbours.

* Point S and Point T is left end of the row in line SB and line TC.

1. In the line-4 UD, what is the distance between Arpita and point D?
(a) 14m (b) 16m (c) 22m
(d) 24m (e) None of these

2. If in line-1 RA, if peoples stand at distance of multiples of 9 in the same order, and rest of them move to line-2 SB and stands from left end in the same order. And if in line 4-UD, if people stand at distance of multiples of 11 in the same order and rest of them move to line-3 TC, stands from left end in the same order. Then total together how many people are standing in lines 2 and 3?
(a) 1 (b) 2 (c) 3
(d) 4 (e) None of these

3. If in line 4-UD, if people stand in multiples of 13 in the same order and rest of them move to line-3 TC and stands from left end in the same order. Then the distance between Anita and point C is?
(a) 2 (b) 12 (c) 14
(d) 20 (e) None of these

4. Suppose line-1 RA is joined to line2-SB to form a new straight-line RB in such a way that distance between point A and S is 5m. If the people in line-1 RA are made to stand in multiples of 12 in that new line, then how far is Sohan from point B?
(a) 16 (b) 21 (c) 26
(d) 33 (e) None of these

5. If in line-1 RA people stand in distance at multiples of 9 in the same order and rest of them move to line-2 SB in the same order from left end, then who will be standing in line-2?
(a) Ankit (b) Sumit
(c) Sohan (d) Sohan and Sumit
(e) None of these

6. In the following question, three statements numbered I, II and III are given. Read all the statements and determine the cause and effect relationship between them.
I. In urban areas, the poor bear the brunt of environmental effects such as water or air pollution.
II. The rapid urban development has outpaced the development of environmental infrastructure in many large cities.
III. Just for the own sake of profit, builders in urban areas are indulge in construction work without tendering about the environment and urban poor, who mostly dies from chronical diseases.
(a) Statement II is the cause, I and III are its effects.
(b) Statement I is the cause, II and III are its effects.
(c) Statement III is the cause, I and II are its effects.
(d) Statement III is the cause and II is its effects while statement I is an effect of some independent cause.
(e) None of these

7. **Statement:** Prime Minister Narendra Modi launched three mega flagship schemes aimed at transforming Urban India, including the much talked about Smart Cities proposal, with a whopping Rs.4 lakh crore kitty having been lined up for the projects. He also unveiled logo of the housing mission, which has his personal touch in the finalization of its design.
Speaking at the event, Modi said, "the decision to make cities smart will be taken not by governments but by the people of the city, the local administration. Let there be competition between cities in development so that smart cities come up."
Which of the following will be an **effect** of the initiative taken by the government?
(a) Ensuring water supply to each household, sewer connections, sanitation and solid waste management in rural and urban governance would be the focus under the scheme.
(b) Quality of life will improve in rural and urban areas.
(c) Provision of roads and public transportation beside implementation of reforms in urban governance would be the focus under the scheme.
(d) Millions of jobs will be created and scarcity of houses will be removed in urban and rural areas.
(e) All of the above.

Direction (8-9): In the following questions, the symbols #, &, @, * , $, % and © are used with the following meanings as illustrated below. Study the following information and answer the given questions:
P#Q - P is the son of Q.
P@Q - Q is the child of P.
P©Q - P is the parent of Q.
P$Q - P is elder than Q.
P*Q- P is the husband of Q.
P&Q- Q is the daughter-in-law of P.
P%Q- P is the wife of Q.

8. If A@B*D&G%E$F#D then how is F related to A?
(a) Grandfather (b) Grandson (c) Daughter
(d) Wife (e) None of these

9. If H*M©O$N#M, the age of N is 20 years and age of H, is 40 years then what is the probable age of O?
(a) 17 years (b) 15 years (c) 23 years
(d) 45 years (e) 12 years

10. The difficulty with the proposed high-speed train line is that a used plane can be bought for one-third the price of the train line, and the plane, which is just as fast, can fly anywhere. The train would be a fixed linear system, and we live in a world that is spreading out in all directions and in which consumers choose the free-wheel systems (cars, buses, aircraft), which do not have fixed routes. Thus a sufficient market for the train will not exist.
Which of the following, if true, most severely weakens the argument presented above?
(a) Cars, buses, and planes require the efforts of drivers and pilots to guide them, whereas the train will be guided mechanically.
(b) Cars and buses are not nearly as fast as the high-speed train will be.
(c) Planes are not a free-wheel system because they can fly only between airports, which are less convenient for consumers than the high-speed train's stations would be.
(d) The high-speed train line cannot use currently underutilized train stations in large cities.
(e) For long trips, most people prefer to fly rather than to take ground-level transportation.

Direction (11-15): In the following questions, the symbols #, &, @ and $ are used with the following meanings as illustrated below. Study the following information and answer the given questions:
Note: The directions which are given indicates exact directions.
P#Q - Q is in the south direction of P.
P@Q - Q is in the north direction of P
P&Q - Q is in the east direction of P at distance of either 12m or 6m
P$Q - Q is in the west direction of P at distance of either 15m or 3m.
P#&Q - Q or P is in the southeast direction of P or Q.
P@&Q - P or Q is in the northeast direction of Q or P.

11. If A&B#&C$D&E@F are related to each other such that F is placed exactly between A and B on line AB. Similarly D and A are vertically inline then what is the possible shortest distance between F and B when DE (length of segment DE) < DC/2 and EC< 10m?
(a) 12m (b) 5 m (c) 4 m
(d) 6m (e) None of these

12. If A&B#&C$D&E@F are related to each other such that D, A are inline, DE=6 m and a perpendicular drawn from E on AB divides AB in two equal parts and D@&B then what is the probable direction of A with respect to F?
(a) North-west (b) West (c) South-west
(d) east (e) Can't be determined

13. K#&T$M#&S&K&Z are related to each other such that K is in north of M then what is the probable direction of Z with respect to M?
(a) North-east (b) West (c) South-west
(d) east (e) Can't be determined

14. K#&T$M#&S&K&Z are related to each other such that K is in north of M . M and K are inline vertically when MT>SK then what is the distance between S and Z When KZ=12 m?
(a) 24m (b) 18m
(c) 15m (d) Either (a) or (b)
(e) None of these

15. K#&T$M#&S&K&Z are related to each other such that K is in north of M . M and K are inline vertically when MT>SK then what is the sum of SK and MT?
(a) 27m (b) 21m
(c) 15m (d) Either (a) or (b)
(e) Either (b) or (c)

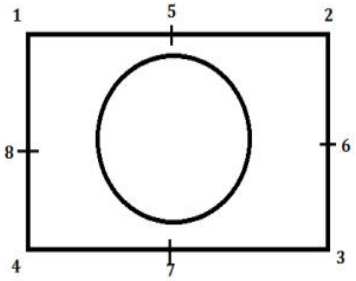
Direction (16-17): Read the instruction carefully and give answer.
Six persons A, B, C, X, Y and Z are sitting in two parallel rows viz. row-1 and row-2. A, B and C are sitting in row-1, while X, Y and Z are sitting in another row. Some of them are facing north and some of them are facing south.
X faces north. The one who sits opposite to X sits second to the right of C. B faces south and sits opposite to the one, who sits to the immediate right of Y. Y sits second right of X. A faces opposite direction of C. Y sits immediate right of Z.

16. How many persons face north direction?
(a) Three (b) Five (c) Two
(d) One (e) None of these

17. Who among the following sits second right of A?
(a) C (b) X (c) Y
(d) B (e) None of these

18. Statement A. City X has recently banned the sale of a drug –XYZ, citing its misuse by youths for other activities.
Statement B. City Y has recently lifted its ban on the sale of the drug XYZ, after a sharp rise in the number of cases of Glaucoma.
Which of the following can be inferred from the above statements?
(a) Drug XYZ is only used in the treatment of Glaucoma.
(b) The number of Glaucoma patients in city X is going to increase in the future.
(c) Drugs XYZ is also used by the sportspersons to enhance their athletic performance.
(d) Drug -XYZ can be used in the treatment of Glaucoma.
(e) None of these

Direction (19-23): Study the following information carefully and answer the question below-
* Numbers are given in the figure considered as their positions.



Eight persons Abhay, Isha, Riya, Rahul, Piya, Diya, Sahil, Sanyam are sitting around the circle having eight vacant chairs. Four of them are facing towards the center while four are facing outside the center.
Only two persons are sitting between Isha and Abhay. Sahil sits second right of Abhay. Rahul and Sahil are immediate neighbours. Riya sits third left of Rahul. Both Abhay and Isha are facing outside the center. Rahul is facing opposite direction of Isha. Piya sits immediate right of Sahil who is facing same direction as Abhay. Sanyam sits second left of Riya. Both Sanyam and Piya are facing same direction.
Now they start playing cards game. They shuffled a pack of cards. 1. Isha draws one card and changes her place according to the given conditions, 2. Abhay draws one card and changes his place according to the given conditions similarly others draw cards given in the condition below-

Conditions:
1. If the card drawn is spade, the person who draws it first moves to position 5 facing opposite direction of current direction, then the second person who also draw spade moves to position 6, similarly 7 and 8.
2. If card drawn is heart, person remains on the same position facing same direction.
3. If the card drawn is diamond, the person who it draws first moves to corner 1 facing same direction, then the second person, who also draw diamond moves to corner 2, similarly 3 and 4.
4. If card drawn is club, person remains on the same position facing opposite direction of current direction.

Draws:
1. Isha draws queen of Club
2. Abhay draws Jack of Club
3. Piya draws 3 of Spade
4. Rahul draws a King of Diamond
5. Diya draws Ace of Heart
6. Sahil draws 9 of Heart
7. Sanyam draws 7 of Diamond
8. Riya draws 4 of Spade

Note: All the persons draws card in a serial way as given above.
(ex- First Isha draws then Abhay draws ……..so on…..)

19. After all persons changed their places based on the above conditions, who among the following is sitting at the corner 2 of the square?
(a) Isha (b) Diya (c) Sahil
(d) Sanyam (e) None of these

20. After all persons changed their places based on the above conditions, how many persons will remains in the circle?
(a) Two (b) Four (c) One
(d) Three (e) None of these

21. After all persons changed their places based on the above conditions, then who among the following is sitting to the immediate right of Diya?

(a) Sahil (b) Riya (c) Abhay
(d) Piya (e) None of these

22. After all persons changed their places based on the above conditions, then how many persons facing away from the center?
(a) Two (b) One (c) Five
(d) Three (e) None of these

23. After all persons changed their places based on the above conditions, then who among the following is sitting at the position 6 of the square?
(a) Sahil (b) Riya (c) Piya
(d) Sanyam (e) None of these

24. In an attempt to check its increasing pollution, Litter City has introduced a levy of Rs. 100 on every private car entering the city. The administration argues that the imposition of this levy, in addition of the existing toll at the entrance of the city, will switch people from using their cars to using the public transport.
Which of the following, if true, provides the best evidence that the city administration's argument is flawed?
(a) The city administration is already facing the ire of taxi drivers whose demand for a rate hike was turned down by the administration.
(b) A recent survey has shown that people living in Litter city have fewer cars than those in the neighboring clean city.
(c) Hardly 10% of the regular bus passengers own their own cars.
(d) The recent hike in the toll for cars already makes it more expensive for people to take a private car into the city than travel in a public transport.
(e) Both (a) and (d)

Direction (25-26): Read the following information answer the given questions.
The agitated guardians of grade IX students of a high-profile public school of North Carolina protested against the newly introduced audio-visual aid of teaching methodology. According to them, it is of benefit to a handful of students only, and majority of students will not be getting any help because of this technology.
These questions are based on the information given above and the sentences given below labeled as I, II, III, IV and V.
I. Change is a gradual process and it takes some time for people to adjust to it.
II. Guardians are happy with the new teaching methodology, i.e. via the use of audio-visual techniques.
III. It is not the responsibility of the school to take care of the weaker students.
IV. This modern technology of teaching should be scrapped as soon as possible.
V. Guardians are unhappy with the new teaching methodology used in the school.

25. Which of the following statements above could be a possible conclusion from the above passage?
(a) Only I (b) Only II (c) Only IV
(d) Both IV and II (e) Only V

26. Which of the following could be a possible statement that should be used by the school management to defend themselves?
(a) Both II and V (b) Only III (c) Only I
(d) Only V (e) Both IV and III

Direction (27-30): Study the following information and answer the given questions:
In alphabetical series A-Z each letter except vowels is assigned a different number from 1-8 (for ex- B is coded as 1, C-2……..K-8)and again those numbers get repeated(for ex- L-1, M-2……..so on).
Also each vowel is assigned a different symbol viz. #, $, %, @, &.
For example-
In coded language-
"She is girl" is coded as - 76% #7 5#61
"What did you like" is coded as - 26$8 3#3 4@& 1#8%
"It is Opinion" is coded as - #8 #7 @4#3#@3
(i) If both first and last letter of a word is vowel then the codes of both the vowels are interchanged.
(ii) If first letter of a word is vowel and last letter is consonant then both are to be coded as *.
(If the word does not satisfy the conditions given above then the letters of that word are to be coded as per the directions given above)

27. What can be the code of 'Nothing perfect'?
(a) 3@86#53 4%64%28
(b) 3@68#35 4%64%28
(c) 3@86#35 4%64%38
(d) 3@86#35 4%64%28
(e) None of these

28. What can be the code of 'Exam was easy'?
(a) *3$* 2$7 *$7* (b) *3$* 2$7 %$74
(c) %3$2 2$7 *$7* (d) *3$* 2$7 $74%
(e) None of these

29. What can be the code of 'Create style'?
(a) 2#6$8% 7841% (b) 26%$8% 7814%
(c) 26%$8% 7841% (d) 26%$6% 7841%
(e) None of these

30. What can be the code of 'Strength of god'?
(a) 768%3586 4@ 5@3
(b) 786%3586 ** 5@3
(c) 786%3586 @* 5@3
(d) 786%3856 4@ 5@3
(e) None of these

Direction (31-33): Read the questions carefully and answer the following questions.
More than 10 persons were sitting in a circular table facing the centre. B is 3rd to the left of C. Two person are sitting between D and B. A sits immediate right of E. One person is sitting between C and E. Less than two person are sitting between D and A. A does not sit second to the right of B.

31. How many persons are sitting in the circular arrangement?
(a) 14 (b) 11 (c) 12
(d) 13 (e) None of these

32. What is the position of C with respect to A?
(a) Third to the left (b) Third to the right
(c) Fourth to the left (d) Fifth to the right
(e) None of these

33. How many persons are sitting between B and A in anti-clockwise direction from B?
(a) 3 (b) 4 (c) 5
(d) 6 (e) 7

Directions (34-35): Each of the questions below consists of a question and two statements numbered I and II given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and;
(a) if the data in statement I alone are sufficient to answer the question, while the data in statement II alone are not sufficient to answer the question.
(b) if the data in statement II alone are sufficient to answer the question, while the data in statement I alone are not sufficient to answer the question.
(c) if the data either in statement I alone or in statement II alone are sufficient to answer the question.
(d) if the data even in both statements I and II together are not sufficient to answer the question.
(e) if the data in both statements I and II together are necessary to answer the question.

34. Five friends Q, R, S, T, V are married on different dates 12, 19, 21, 28, 31 (but not necessarily in the same order) of the month of January and September on the same year. T is married on which of the following date of which month?
(I) Both T and Q are not married on even date of the month. T is married before Q. Two persons are married in between T and V.
(II) No body is married after R. Only S is married on a date in between T and Q. S is married on an even date. More than three persons are married in the same month.

35. Six boxes A, B, C, D, E, F of different colours are placed one above another. Also, each box has different number of toffees. No two boxes has same number of toffees. Only two boxes are placed in between B and Green box. No box is placed above B. Box D is placed immediately above Blue box. Only Red box is placed in between Green box and A. Only one box is placed between Red and Blue box. Only one box is placed in between D and E. Only one box is placed between Orange box and C. Box C is not of Red colour. How many number of toffees does Blue box have?
(I) Box E has more number of toffees than 8 while box C has more number of toffees than 20. Box D has 21 toffees. The box which has lowest and 2nd lowest number of toffees has 10 and 12 toffees respectively. Box A, C, D and F has odd number of toffees.
(II) A has more number of toffees than B but not more than D. The difference in the number of toffees in box F and E is 7. The box which has highest number of toffees has 8 more toffees than box F. Total number of toffees in box B and A is 31.

Directions (36-40): Study the following information carefully and answer the questions that follow:
Seven persons are sitting in a straight line. Four of them are facing south and remaining of them are facing north. They also like different fruits Apple, banana, grapes, guava, kiwi, mango and orange but not necessarily in the same order. Those seven people are also sitting in alphabetical order from left end (Consider this according to your left end).
The person who likes grapes sits second to the left of P. Two persons sit between the one who likes grapes and the one who likes banana. Both the immediate neighbours of the one, who likes banana faces opposite direction to each other (i.e. if one faces to north then the other faces to south vice versa). Q likes kiwi. The one who likes mango sits second to the right to Q. Only one person sits between R and the one, who likes guava. The persons who like banana and Apple are immediate neighbours. The one, who likes orange sits third to the right of the person who likes Mango. Q and R face opposite direction to each other (i.e. If one faces north then the other faces south vice versa). The one who likes banana faces south. The person who likes guava faces north.

36. Who among the following is sitting in the row?
(a) X (b) V (c) O
(d) U (e) M

37. Who among the following person faces north direction?
(a) R (b) S (c) P
(d) Q (e) O

38. Which of the following fruit does R like?
(a) Grapes (b) Guava (c) Mango
(d) Apple (e) None of these

39. If apple is related to P and Orange is related to R then kiwi is related to whom?
(a) R (b) S (c) T
(d) O (e) None of these

40. Which of the following combination is true?
(a) P-Apple (b) R-Banana (c) S-orange
(d) O-grapes (e) T-guava

41. The US President has downsized his country's nuclear arsenal, helped to negotiate a deal to halt Iran's nuclear-weapons programme and led a global initiative to secure radioactive materials. But his legacy on nuclear issues remains uncertain, as the progress in securing nuclear materials has been slow. Which of the following is an assumption of the speaker?
(a) There could be a break in the president's initiative at securing radioactive materials.
(b) One's lasting fame depends on the velocity with which one's initiatives are carried out.
(c) The deteriorating progress will eventually lead to the failure of the initiative.
(d) The US can never convince a country to give up its nuclear initiatives.
(e) None of these

Direction (42-45): A word and number arrangement machine when given an input line of words and numbers rearranges them following a particular rule in each step. The following is an illustration of input and rearrangement.

Input- njes glfu 53 18 31 44 wird dect
Step I: yktf 106 njes glfu 18 31 44 dect
Step II: plgu 88 yktf 106 glfu 18 31 dect
Step III: inhw 62 plgu 88 yktf 106 18 dect
Step IV: fgev 36 inhw 62 plgu 88 yktf 106
Answer the following questions based on the following input: -

Input- olpu htqs 21 73 48 9 xcek bdgv

42. What will be the resultant if fifth number from the left end of step I is added to fifth number from right end of step III?
(a) 153 (b) 106 (c) 117
(d) 98 (e) None of these

43. What will be the third step of the given input?
(a) Step III-42 jvsu qnrw 96 zegm 146 9 bdgv
(b) Step III- jvsu 42 qnrw 96 zegm 146 bdgv 9
(c) Step III- jvsu 42 qnrw zegm 96 146 9 bdgv
(d) Step III- jvsu 42 qnrw 96 zegm 146 9 bdgv
(e) None of these

44. Which of the following word/number will be fourth to the left of sixth from the left end in step II?
(a) 96 (b) 146 (c) zegm
(d) bdgv (e) None of these

45. What will be the twice of the difference of sixth number from the left end of step I and fifth number from right end of step IV?
(a) 14 (b) 12 (c) 28
(d) 44 (e) None of these

QUANTITATIVE APTITUDE

Directions (46-50): Given below, the table shows online and offline contestant taking part in a survey from five villages and total contestants who have not completed the survey (both online as well as offline). Study the data carefully and answer the following questions based on it.

Note:
1) Total contestants = Online contestants + Offline contestants
2) Total contestants = constants who completed survey + Contestants who have not completed the survey

Village	Online Contestant (in figure)	Offline contestant (in %)	Contestants who have not completed the survey (online + offline)
M	576	52	96
N	630	58	120
O	1188	28	306
P	486	64	45
Q	792	45	153

46. Offline contestants who have not completed the survey from village Q is 12.5% more than online contestants who have not completed the survey from same village. Find number of contestants who completed offline survey is what percent of the number of contestants who completed online survey from village Q?
(a) 75.25% (b) 78.75% (c) 79.5%
(d) 81.25% (e) 72.75%

47. In village N, out of total contestants who have not completed the survey 35% are online contestants while remaining are offline contestants. Find number of offline contestants who completed the survey is how much more then number of online contestants who completed the survey?
(a) 78 (b) 164 (c) 178
(d) 240 (e) 204

48. In village O, ratio between contestants who have not completed online survey to offline survey is 10:7. Find the ratio of contestants who have completed offline survey to contestants who have completed online survey.
(a) 3 : 1 (b) 1 : 3 (c) 2 : 1
(d) 1 : 2 (e) 4 : 9

49. Find the difference between number of contestants who have completed survey in village Q and number of contestants who have completed survey in village P?

(a) 18 (b) 15 (c) 12
(d) 9 (e) 21

50. Total contestants from village M are what percent of the total contestant of village N who have completed the survey.
(a) 25% (b) 125% (c) 20%
(d) 80% (e) 75%

Directions (51-55): Find the wrong number in the series:

51. 10.8, 9.9, 11.9, 9, 12.6, 8.1
(a) 10.8 (b) 9.9 (c) 9
(d) 11.9 (e) 12.6

52. 8, 10, 20, 50, 120, 248
(a) 120 (b) 8 (c) 20
(d) 248 (e) 10

53. 9, 5, 6, 11, 23, 60
(a) 9 (b) 6 (c) 11
(d) 23 (e) 60

54. 11, 20, 32, 60, 116, 228
(a) 11 (b) 60 (c) 32
(d) 116 (e) 20

55. 360, 354, 347, 322, 273, 152
(a) 152 (b) 322 (c) 347
(d) 354 (e) 360

Directions (56-60): Given below data shows vehicles on three highways (X, Y and Z) on three different days (Monday, Tuesday and Wednesday). Study the data carefully and answer the following questions.
Number of vehicles on highway X on Monday is 3/5 of the number of vehicles on highway X on Wednesday. Number of vehicles on highway Y on Monday to number of vehicle on highway Z on Monday is in the ratio 9 : 10.
On Tuesday, average number of vehicles on highway X and highway Z is equal to the number of vehicles on highway Y. Total number of vehicles on all the three highways is 12000 on Tuesday. Number of vehicles on highway Z on Tuesday is 25% more than number of vehicles on highway Y on Monday.
Number of vehicles on highway Y on Monday, Tuesday and Wednesday is in the ratio 18 : 20 ; 27. Number of vehicle on highway Z on Wednesday is 11/4 of number of vehicle on highway X on Monday. Average number of vehicles on highway X on Monday, Tuesday and Wednesday is 3300.

56. Total number of vehicles on highway Z on all the three days together is how much more than total number of vehicles on highway Y on all the three days together ?
(a) 1800 (b) 2100 (c) 2400
(d) 2700 (e) 3000

57. On Thursday, number of vehicles on highway X, Y and Z increase by 10%, 15% and 25% respectively as compare to Wednesday. Find total number of vehicles on all the three highways on Thrusday.
(a) 18710 (b) 18760 (c) 18810
(d) 18860 (e) 18960

58. Find the ratio of number of vehicles on highway X on Tuesday to number of vehicles on highway Z on Monday.
(a) 7 : 8 (b) 7 : 9 (c) 3 : 5
(d) 5 : 8 (e) 4 : 7

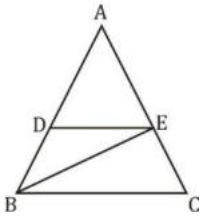
59. Number of vehicles on highway Z on Wednesday is what percent more than number of vehicle on same highway on Monday.
(a) 55% (b) 60% (c) 65%
(d) 70% (e) 75%

60. Total number of vehicles on highway Z on Tuesday is of three categories (Car, Trucks and bikes) in which 25% of vehicle are cars, out of remaining 40% are trucks and remaining are bikes. Find the difference between bikes and trucks on highway Z on Tuesday ?
(a) 425 (b) 525 (c) 575
(d) 625 (e) 675

61. $\frac{a}{b}$ is a fraction value. If reverse of this fraction is subtracted from the fraction value then the answer is $\frac{11}{30}$. 'a' and 'b' both are positive integer and less than 8.
Quantity I: Value of 'a – 4'
Quantity II: $(a + b)^2 - 4ab$
(a) Quantity I > Quantity II
(b) Quantity I < Quantity II
(c) Quantity I ≥ Quantity II
(d) Quantity I ≤ Quantity II
(e) Quantity I = Quantity II or No relation

62. A box contains 3 Red ball, X green ball and 7 blue balls. Number of green balls are greater than number of red balls but less than number of blue balls.
Quantity I: Probability of choosing one green ball from the box.
Quantity II: Probability of choosing one red ball and one blue ball from the box.
(a) Quantity I > Quantity II
(b) Quantity I < Quantity II
(c) Quantity I ≥ Quantity II
(d) Quantity I ≤ Quantity II
(e) Quantity I = Quantity II or No relation

63. BE is angle bisector on ∠DEC. DE∥BE . ∠ABC = 60°. ∠ACB is 50% of ∠EAB.



Quantity I: ∠AEB
Quantity II: ∠BDE

(a) Quantity I > Quantity II
(b) Quantity I < Quantity II
(c) Quantity I ≥ Quantity II
(d) Quantity I ≤ Quantity II
(e) Quantity I = Quantity II or No relation

64. B is 25% more efficient than A. Ratio of time taken by B and C alone to complete the work is 3 : 5.
Quantity I: Time taken by A and B together to complete the work if both work with 100% more efficiency.
Quantity II: Time taken by B and C together to complete the work if both work with 125% more efficiency.
(a) Quantity I > Quantity II
(b) Quantity I < Quantity II
(c) Quantity I ≥ Quantity II
(d) Quantity I ≤ Quantity II
(e) Quantity I = Quantity II or No relation

65. $a^{4x} = 81^x$ and $b^{3x} = -27^x$
Quantity I: 'a + b –3'
Quantity II: $-|ab|$
(a) Quantity I > Quantity II
(b) Quantity I < Quantity II
(c) Quantity I ≥ Quantity II
(d) Quantity I ≤ Quantity II
(e) Quantity I = Quantity II or No relation

Directions (66-70): The following questions are accompanied by two statements (i) and (ii). You have to determine which statement(s) is/are necessary / sufficient to answer the question.

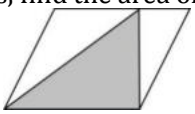
66. In a group of boys and girls, 20% boys and 30% girls like the game chess. Find the total number of boys in the group.
(i) Number of boys like chess is equal to the number of girls like chess.
(ii) 70 girls present in the group do not like chess.
(a) Only (i)
(b) Only (ii)
(c) Only (i) or Only (ii)
(d) Both (i) and (ii) together required.
(e) Both (i) and (ii) are not sufficient

67. Find the probability of getting one rotten egg.
(i) Probability of getting 2 rotten egg from the total of 10 egg is $\frac{2}{15}$.
(ii) Number of rotten egg is 2 less than the number of fresh egg.
(a) Only (i)
(b) Only (ii)
(c) Only (i) or Only (ii)
(d) Both (i) and (ii) together required.
(e) Both (i) and (ii) are not sufficient

68. Find the rate of interest.
(i) A sum invested on S.I. for 5 year becomes Rs5160.
(ii) A sum become 3 times more after 2 year on C.I
(a) Only (i)
(b) Only (ii)
(c) Only (i) or Only (ii)
(d) Both (i) and (ii) together required.
(e) Both (i) and (ii) are not sufficient

69. Sum of three numbers is 91 . Find the smallest number.
(i) Average of smallest and largest number is 25.
(ii) Sum of difference of second largest and smallest number and largest and second largest number is 40.
(a) Only (i)
(b) Only (ii)
(c) Only (i) or Only (ii)
(d) Both (i) and (ii) together required.
(e) Both (i) and (ii) are not sufficient

70. In given rhombus, find the area of shaded region.



(i) Area of rhombus is given
(ii) Side of rhombus is given
(a) Only (i)
(b) Only (ii)
(c) Only (i) or Only (ii)
(d) Both (i) and (ii) together required.
(e) Both (i) and (ii) are not sufficient

71. The sum of ages of A, B and C is 96 years. Two years hence, the ratio between ages of A and B will be 5 : 7 and the ratio between C's age one year before and B's age after one year will be 17 : 9. Find A's age after 8 years ?
(a) 26 yrs (b) 32 yrs (c) 18 yrs
(d) 28 yrs (e) 16 yrs

72. If the sum of diameter of a circle of radius 'r' and radius of semicircle of radius 'R' is 42 cm, then find the radius of another circle whose circumference is 200% more than sum of circumference of given circle and semicircle ?
(a) 42 cm (b) 48 cm (c) 63 cm
(d) 54 cm (e) 60 cm

73. A shopkeeper buys a chair and a table for Rs. 1500. He sells the chair at 20% profit and table at 30% profit. If total profit is $33\frac{1}{3}$% of S.P. of table, find C.P. of chair ?
(a) Rs 600 (b) Rs 900 (c) Rs 750
(d) Rs 650 (e) Rs 550

74. There are two vessels A and B having quantities milk and water. The ratio of quantities in vessel A and B is 13 : 11 and both of them have equal quantities of milk. The quantity of water in vessel A and vessel B is 40 L and 30 L respectively. The mixtures of both vessels are poured into vessel C. Find the ratio of milk and water in vessel C ?
(a) 2:5 (b) 5:7 (c) 6:7
(d) 3:5 (e) 6:5

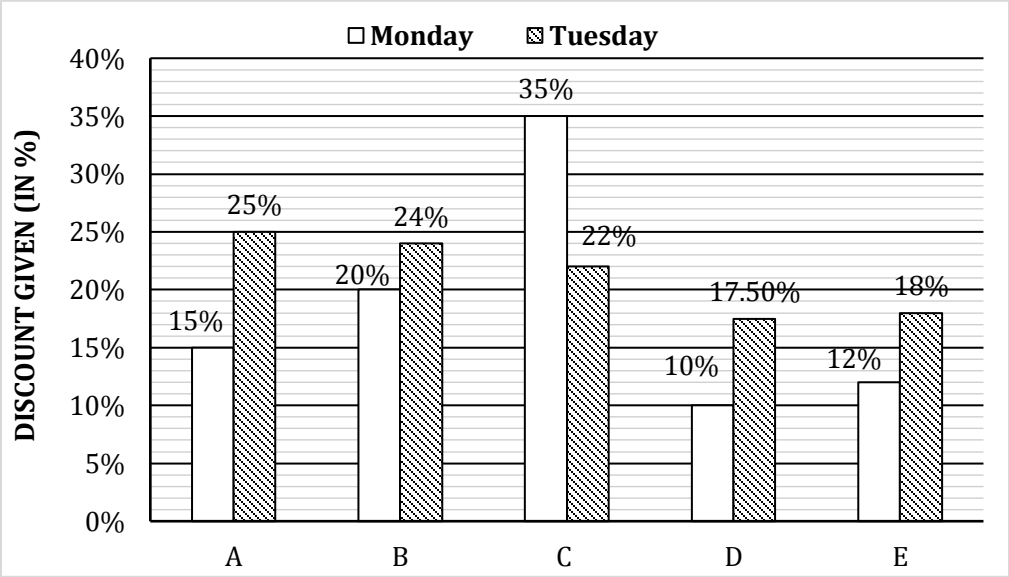
75. A is 20% more efficient than B and 50% more efficient than C. If all of them working together complete the work in 24 days, then find in how many days B alone will complete the work?

(a) 60 days (b) 54 days (c) 45 days
(d) 72 days (e) 90 days

Directions (76-80): Given below the bar graph shows discount percentage given on five articles on two days. Table given below shows mark price of these five articles. Study the data carefully and answer the follow question.

Note:

1. Cost price and Mark price of articles is same on both days.
2. Some data is missing in table. Student is expected to find out that data according to questions



Articles	Markup Price
A	720
B	–
C	900
D	–
E	1200

76. Ratio of cost price of article 'A' to article 'C' is 8 : 9. On Monday, if seller earns 30% profit on article 'C'. Find profit percent of seller on selling article 'A' on Monday and Tuesday together?

(a) 42% (b) 44% (c) 46%
(d) 48% (e) 52%

77. Selling price of Article 'D' on Tuesday is 37.5% less then selling price of article 'E' on Monday. Cost price of article 'C' is 25% less than the selling price of article 'D' on Monday. Find the profit earn by seller on seller article 'C' on Tuesday.

(a) 125 (b) 132 (c) 144
(d) 153 (e) 162

78. Find the ratio of cost price of article 'B' to cost price of article 'D', if on Monday seller earn 44% profit on selling article 'D' and 40% profit on article 'B'. It is given that mark price of article 'D' is 8/7 of mark price of article 'B'.

(a) 1 : 2 (b) 2 : 3 (c) 3 : 4
(d) 4 : 5 (e) 5 : 6

79. Total mark price of article 'B' and article 'D' is Rs. 1400 while total cost price of article 'B' and article 'D' is 820. If seller earn 42.5% profit on selling article 'B' on Tuesday while 44% profit on article 'D' on Monday, then Mark price of Article 'A' is what percent of the Mark price of article 'D'?

(a) 70% (b) 80% (c) 90%
(d) 95% (e) 98%

80. Find the average selling price of article 'A', 'C' and 'E' together on Tuesday?

(a) 732 (b) 736 (c) 742
(d) 746 (e) 752

ENGLISH LANGUAGE

Directions (81-85): Read the following passage carefully and answer the questions given below it. Certain words are given bold to help you to locate them while answering some of the questions.

In 2002, the cognitive scientist Daniel Kahneman of Princeton University won the Nobel Prize in Economics for work done with his longtime collaborator Amos Tversky (who died in 1996). Their work had to do with judgement and decision-making—what makes our thoughts and actions rational or irrational. They explored how people make choices and assess probabilities, and uncovered basic errors that are typical in decision-making.

The thinking errors they uncovered are not trivial mistakes in a parlor game. To be rational means to adopt appropriate goals, take the appropriate action given one's goals and beliefs, and hold beliefs that are commensurate with available evidence. It means achieving one's life goals using the best means possible. To violate the thinking rules examined by Kahneman and Tversky thus has the practical consequence that we are less satisfied with our lives than we might be. Research conducted in my own laboratory has indicated that there are systematic individual differences in the judgement and decision-making skills that Kahneman and Tversky studied.

Ironically, the Nobel Prize was awarded for studies of cognitive characteristics that are entirely missing from the most well-known mental assessment device in the behavioral sciences: intelligence tests. Scientists and laypeople alike tend to agree that "good thinking" encompasses sound judgment and decision-making – the type of thinking that helps us achieve our goals. Yet assessments of such good (rational) thinking are nowhere to be found on IQ tests.

Intelligence tests measure important things, but they do not assess the extent of rational thought. This might not be such a grave omission if intelligence were a strong predictor of rational thinking. But my research group found just the opposite: it is a mild predictor at best, and some rational thinking skills are totally dissociated from intelligence.

To an important degree, intelligence tests determine the academic and professional careers of millions of people in many countries. Children are given intelligence tests to determine eligibility for admission to school programs for the gifted. Corporations and the military depend on assessment and sorting devices that are little more than disguised intelligence tests.

Perhaps some of this attention to intelligence is necessary, but what is not warranted is the tendency to ignore cognitive capacities that are at least equally important: the capacities that sustain rational thought and action.

Critics of intelligence tests have long pointed out that the tests ignore important parts of mental life, mainly non-cognitive domains such as socio-emotional abilities, empathy, and interpersonal skills. But intelligence tests are also radically incomplete as measures of cognitive functioning, which is evident from the simple fact that many people display a systematic inability to think or behave rationally despite having a more than adequate IQ.

For a variety of reasons, we have come to overvalue the kinds of thinking skills that intelligence tests measure and undervalue other important cognitive skills, such as the ability to think rationally.

Psychologists have studied the major classes of thinking errors that make people less than rational. They have studied people's tendencies to show incoherent probability assessments; to be overconfident in knowledge judgments; to ignore the alternative hypothesis; to evaluate evidence with a "my side" bias; to show inconsistent preferences because of framing effects; to over-weigh short-term rewards at the expense of long-term well-being; to allow decisions to be affected by irrelevant context; and many others.

All of these categories of failure of rational judgment and decision-making are very imperfectly correlated with intelligence—meaning that IQ tests tend not to capture individual differences in rational thought. Intelligence tests measure mental skills that have been studied for a long time, whereas psychologists have only recently had the tools to measure the tendencies toward rational and irrational thinking. Nevertheless, recent progress in the cognitive science of rational thought suggests that nothing—save for money—would stop us from constructing an "RQ" test.

Such a test might prove highly useful. Suboptimal investment decisions have, for example, been linked to overconfidence in knowledge judgments, the tendency to over-explain chance events, and the tendency to substitute affective valence for thought. Errors in medical and legal decision-making have also been linked to specific irrational thinking tendencies that psychologists have studied.

There are strategies and environmental fixes for the thinking errors that occur in all of these domains. But it is important to realize that these thinking errors are more related to rationality than intelligence. They would be reduced if schools, businesses, and government focused on the parts of cognition that intelligence tests miss.

Instead, these institutions still devote far more attention and resources to intelligence than to teaching people how to think in order to reach their goals. It is as if intelligence has become totemic in our culture. But what we should really be pursuing is development of the reasoning strategies that could substantially increase human well-being.

81. Choose the most suitable title for the passage.
(a) Cognition and Psychometrics.
(b) Judgment under Uncertainty.
(c) Psychological Science.
(d) Rationality and Intelligence.
(e) Sensibility versus Intelligence.

82. According to the passage, intelligence tests at their best...
A. are measures of cognitive functioning.
B. ignore important cognitive capacities.
C. are incomplete measures of one's intelligence.
D. ignore one's suitability for academic and professional careers.
E. are poor indicators of the capacity for right action.
(a) A, B, and E (b) A, C, and D (c) B, D, and E
(d) B and E (e) A and C

83. The passage supports which of the following inferences?
A. People are less satisfied with their lives than they need to be.
B. IQ tests do not provide an accurate measure of one's intelligence.
C. It is not possible to design a test that would accurately measure one's decision making skills.
D. For activities such as research and management high IQ scores are not very relevant.
E. A person with more than adequate IQ is likely to be overconfident in knowledge judgments.
(a) A only (b) A and C (c) C only
(d) B, C, and D (e) None of the above

84. The thesis put forward by the author in defence of Daniel Kahneman would be less supportable if which of the following was true?
(a) Success of rational judgments is imperfectly correlated with intelligence.
(b) A reliable test to measure rational decision making skills cannot be constructed.
(c) If institutions and government devoted more funds and attention to the development of intelligence.
(d) Failure of rational judgments is imperfectly correlated with intelligence.
(e) None of these.

85. According to the passage, which of the following is an example of thinking errors uncovered by psychologists?
(a) Big mistakes committed in a parlour game.
(b) Consistent probability assessments.
(c) Confidence in one's knowledge.
(d) Evaluation of alternative hypothesis.
(e) None of these.

Directions (86-90): Read the following passage carefully and answer the questions given below it. Certain words are given bold to help you to locate them while answering some of the questions.

Over the past 150 years dramatic failures have occurred, at surprisingly regular intervals, in the field of bridge building.

In 1847, the first major structural failure on Britain's expanding railway network occurred at Chester, England. The Dee Bridge, whose cast-and wrought-iron design followed common practice for the period, collapsed under a passing train, killing everyone aboard. Subsequent investigation revealed that the structure, the longest of its kind, simply pushed the limits of railroad-bridge engineering too far.

In 1879, the longest bridge in the world spanned the River Tay at Dundee, Scotland. Composed of many modest spans, the structure involved no radically new design concepts and seemed to be a mere application of proven technology. However, the force of the wind was grossly underestimated and workmanship was inferior. As a result, the Tay Bridge, vulnerable in a gale, was blown off its supports.

In 1907, the longest span in the world was being constructed over the St. Lawrence River near Quebec, Canada. The bridge was of a relatively new type, known as a cantilever, which had become quite fashionable. Although it was only slightly longer than the highly successful cantilever bridge over the Forth River near Edinburgh, Scotland, the Quebec Bridge was so inadequately designed that it collapsed before it was completed.

In 1940, the third longest suspension bridge in the world was opened in Washington State. The Tacoma Narrows Bridge was designed as state of the art, which included a strong aesthetic preference for slender structures. Within four months of its opening, the bridge was destroyed by winds in a manner totally unanticipated by its engineers.

In 1970, steel box-girder bridges in Milford Haven, Wales, and in Melbourne, Australia, failed spontaneously while under construction. Both were among the longest structures of their kind and were thought to be just natural applications of existing technology.

In 2000, the much-anticipated opening of London's Millennium Bridge over the River Thames was followed only three days later by its closure. The sleek footbridge swayed unexpectedly and excessively under the feet of pedestrians, and it was deemed too dangerous to use. What should have been a mere extension of the millennia-old art of building pedestrian bridges, proved to be a modern engineering embarrassment?

The thirty-year interval between historic bridge failures was first highlighted by the work of Paul Sibly, who wrote a thesis on the subject, and his University of London advisor, A.C. Walker. They noted the cyclical regularity of

such occurrences and speculated that it represented a gap in communications between generations of engineers.
Although each of the notable failures involved a different type of bridge, in no case was the structure radically new. Each used technology that engineers had been confidently employing for bridges, and for which the assumed loads and methods of analysis were well established. In every case, engineers believed that they were just building incrementally on successful practice.
In fact, designing in a climate of success can be dangerous for an engineer. Successful experience teaches us only that what has been accomplished in the past has worked. But things that work on a small scale do not necessarily work when slightly larger.
This was known to Vitruvius, who wrote about Greek and Roman engineering more than 2,000 years ago. It was also known to Galileo, who noted that Renaissance engineers who followed successful methods of building ships and moving obelisks were often surprised by the spontaneous failures when tried with larger ships and obelisks.
Failures always reveal weaknesses and provide incontrovertible evidence of our incomplete understanding of how things work. When the failures described above occurred, engineers were sensitized to their own limitations and so approached subsequent designs—no matter of what kind of bridge—with renewed respect for the laws and forces of nature. Unfortunately, human memory fades with time, and new generations of engineers with no vivid experience of past failures can proceed with hubris to design again beyond wise limits.
The history of engineering is no mere adjunct to technical know-how. A historical perspective on bridge building or any other engineering specialty provides a caveat about how our humanity affects our thinking. Building a new bridge following a familiar model can lead to complacency. Building a novel bridge, especially in the wake of a spectacular failure, forces engineers to think from scratch and also to think more deeply and critically. Hence, the paradox that success leads to failure, and failure leads to success.
The cable-stayed bridge is a form that is currently being pushed to limits and beyond those originally imagined to apply to it. Widespread successes with cable-stayed structures have made the type almost commonplace. As such, its development into ever longer spans is following the historic pattern that in the past has led to failures. Whether there will be a major cable-stayed bridge failure soon - or around the year 2030 - will most likely depend not so much on computer analyses as on how well engineers know their history and are determined not to repeat it.

86. Which of the following maxims will most suitably introduce the above passage?
(a) "The higher you rise, the lower you fall."
(b) "This is how the world ends, not with a bang but a whimper."
(c) "Those who do not remember the past are condemned to repeat if."
(d) "An ounce of prevention is worth a pound of cure."
(e) "A chain is only as strong as its weakest link."

87. The writer is most likely to consider which of the following as the real reason for the cyclical regularity of bridge collapses?
(a) The radical change that engineering principles undergo at periodic intervals.
(b) The bridge building technologies being useful for a limited period of approximately 30 years.
(c) The communication gap between two generations of engineers.
(d) Engineers do not realise that things may not work at larger scales.
(e) The techniques that sustain small bridges are applied to large ones.

88. According to the passage, which of the following bridge techniques may lead to a collapse (if at all) in the near future?
(a) The beam type bridge which is built on two or more supports which hold up a beam.
(b) The arch type of bridge on which the weight is carried outward along two paths, curving toward the ground.
(c) A suspension bridge hung by cables which hang from towers. The cables transfer the weight to the towers, which transfer the weight to the ground.
(d) The cantilever type of bridge, in which two beams support another beam where the deck or traffic way is. The two beams must be anchored well.
(e) None of these.

89. According to the writer, what is the importance of engineering failures?
(a) They reveal mankind's weaknesses.
(b) They are proof for man's incomplete understanding of phenomena.
(c) They sensitize the engineers to the limitations of phenomena.
(d) They force engineers to review their knowledge.
(e) All of the above.

90. Which of the following explains the contextual meaning of the word novel as used in the passage?
"Building a **novel** bridge, especially in the wake of a spectacular failure, forces engineers to think from scratch and also to think more deeply and critically."
(a) Beginning as the resumption or repetition of a previous act or thing.
(b) Not resembling something formerly known or used.
(c) Having recently come into existence or use.
(d) What is freshly made and unused.
(e) Striking especially in conception or style.

Directions (91-92): In the following questions, Out of five alternatives, choose the one which best expresses the meaning of the given word.

91. Endearment
(a) damage (b) endurance (c) clear
(d) tenderness (e) development

92. Verve
(a) vote (b) vessel (c) buoyancy
(d) erroneous (e) Voracity

Directions (93-94): In the following questions, Out of five alternatives, choose the one which is opposite in the meaning of the given word.

93. Fulmination
(a) obloquy (b) denunciation
(c) compliment (d) diatribe
(e) gaze

94. Saboteur
(a) absorb (b) communication
(c) ally (d) similar
(e) adversary

Directions (95-100): In the passage given below there are blanks which are to be filled with the options given below. Find out the appropriate pair of words in each case which can most suitably complete the sentence without altering the meaning of the statement.

While the Padmavati issue rages on, it is instructive to observe how little by way of a/an _____(95) reaction by the government has been forthcoming. In the face of public _____(96) made in the full glare of national media, by those protesting against the film as well leaders of its own party, the government has offered no substantive comment.

Instead, several states have acted by banning the film, without having seen it. At a time when a comment on social media can get young people into jail, the people making the very gruesome threats against some well-liked public figures have faced no _____(97) whatsoever. This has already invited much criticism on social media, but what is_____(98) is how easy it is for the state to ignore the critics and go about its business unaffected.

Democracy works by creating several _____(99) of oversight, each acting in a specific way. The opposition, the legislative, the judiciary, the bureaucracy, the media including social media and finally, the electorate are some of the mechanisms by which a regime becomes _____(100). Together, these institutions work to guide, shape, challenge, amplify, audit and limit any regime's actions.

95. (a) Canonical/Fitting (b) Customary/ Bonafide
(c) Firm/Stout (d) Authoritative/Official
(e) Crucial/Paramount

96. (a) Demands/Appeal (b) Presages/Threats
(c) Rampart/Staves (d) Abutment/Backing
(e) Controversy/Affairs

97. (a) Backlash/Reverberation
(b) Repercussion/Support
(c) Alacrity/Hoopla
(d) Lining/Stanchion
(e) Negation/Action

98. (a) Striking/Startling (b) Noticeable/Evident
(c) Chronic/Inveterate (d) Moot/Dubious
(e) Contrasting/Unusual

99. (a) Platoons/Cartels (b) Assemblages/Groups
(c) Stages/Notches (d) Strata/Layers
(e) Phases/Division

100. (a) Efficient/Competent (b) Accountable/Liable
(c) Systematic/Virtuous (d) Gratifying/Prolific
(e) Resilient/Tractable

Directions (101-104): In the question given below some of the part has been highlighted. You have to find the part which is both grammatically and contextually incorrect. Ensure that the meaning of the statement remains unchanged.

101. While there is no quibble about the need **to deny unscrupulous and wilful defaulters** who has put banks and other creditors in **substantial financial hardship the opportunity to regain control** of corporate assets that have been put under resolution, the category of people barred is too broad and risks the very objectives of the original code.
(a) While there is no quibble about the need
(b) who has put banks and other creditors in
(c) of corporate assets that have been put under resolution
(d) the category of people barred is too broad and risks the very objectives of the original code.
(e) No Error

102. Our constant usage of the Internet threatens our reading capacity. **It results in our decreasing capacity to concentrate**, think and understand things as we were used to. **And while the decision-making part of our brain works** in overdrive by clicking, skimming, browsing, liking, sharing, bookmarking, it is true that we are choosing faster, but we are not understanding in depth what we chose and why we chose what we did.
(a) Our constant usage of the Internet threatens our reading capacity
(b) think and understand things as we were used to
(c) in overdrive by clicking, skimming, browsing, liking, sharing, bookmarking, it is true that we are choosing faster
(d) but we are not understanding in depth what we chose and why we chose what we did
(e) No Error

103. **Any interruption**, by indulging in a conflict with nations small or big, would not only damage but **derail the levels of** progress that is essential to achieve this objective.
(a) by indulging in a conflict with nations small or big
(b) would not only damage but
(c) progress that is essential
(d) to achieve this objective
(e) No Error

104. According to the Amendment Bill, when a State government **approaches the Centre with a** dispute, the later shall set up a **Disputes Resolution Committee** consisting of expert members from relevant field at resolve the dispute amicably.
(a) According to the Amendment Bill, when a State government
(b) dispute, the later shall set up a
(c) consisting of expert members from
(d) relevant field at resolve the dispute amicably
(e) No Error

Directions (105-108): In the question given below few sentences are given which grammatically correct and meaningful. Connect them by the word given above the statements in the best possible way without changing the intended meaning. Choose your answer accordingly from the options to form a correct, coherent sentence.

105. But
(A) With platform companies sponging off advertising revenue and ISP providers getting the power to convert cyberspace into a controlled premium space, it looks like the Internet is set to lose its status as rebel angel.
(B) In case of Net Neutrality debate, the associated statistics and analysis despite available in humongous amounts clearly show no signs of favoritism making the numbers irrelevant.
(C) Internet facilitated easy communication, broke the monopoly of the one-to-many format to create a many-to-many structure, and democratised the communication universe.
(D) When a tragedy of immense proportion is unfolding, it is literature that provides clues and means to deal with it.
(a) Only C-A (b) Only D-B
(c) Both A-C & D-B (d) Both D-B & C-A
(e) No connection possible

106. Moreover
A. such as wind-driven dust and unpaved roads, will be watered at least twice a day.
B. implementation of concrete mitigating measures to tackle environmental issues that arise due to the construction work on various projects
C. Any increases in the noise level that stems from the construction activity should not go higher since the project area is already a noisy environment.
D. a noise control plan should be prepared. This will ensure that equipment noise is reduced at source through proper designs and maintenance and by repairing construction machinery and equipment with the promise to ensure as far as possible that construction activity near schools would be conducted during their vacation period.
(a) Only D-A (b) Only B-A (c) Only A-C
(d) Only C-D (e) No connection possible

107. Along with
A. In the long-run, our biggest challenge is global climate change. As rivers dry up and chronic drought becomes the norm, the country needs policies in place to ensure the equitable distribution of water. Conservation policies will have to be put in place and the use of water prioritised.
B. Water is inefficiently diverted for agricultural use, where allocation is done on the basis of the size of landholdings rather than need.
C. water, steps to check our burgeoning population will also be needed. In the political realm, the Indus Waters Treaty may need to be renegotiated and updated to better reflect the reality of climate change.
D. Even within the same communities, women are often dependent on men for access to safe drinking water
(a) Only C-D (b) Both D-C & A-B
(c) Only D-A (d) Only A-C
(e) No connection possible

108. In the question given below, parts of sentences are jumbled up. Arrange them sequentially to form a correct, coherent sentence.
Russia, wary of NATO expansion plans, was being pilloried by the West for the conduct of its war in Chechnya since 1994.It was defended by China, in return for which Moscow stopped criticising China's human rights record and reiterated its support for China's policies on Taiwan and Tibet.
(a) While Russia, wary of NATO expansion plans, was being pilloried by the West for the conduct of its war in Chechnya since 1994, it was defended by China, in return for which Moscow stopped criticising China's human rights record and reiterated its support for China's policies on Taiwan and Tibet.
(b) In spite of the fact that Russia, wary of NATO expansion plans, was being pilloried by the West for the conduct of its war in Chechnya since 1994, it was still supported by China in return for which Moscow stopped criticising China's human rights record and reiterated their support for China's policies on Taiwan and Tibet.

(c) Russia being wary of NATO expansion plans is pilloried by the West for the conduct of its war in Chechnya since 1994, it was defended by China, in return for which Moscow stopped criticising China's human rights record and reiterated its support for China's policies on Taiwan and Tibet.
(d) Notwithstanding of the fact that Russia, wary of NATO expansion plans, was being pilloried by the West for the conduct of its war in Chechnya since 1994, it was still supported by China in return for which Moscow stopped criticising China's human rights record and reiterated its support for China's policies on Taiwan and Tibet.
(e) None of these.

Directions (109-111): The following statements has two blanks which are to be filled with the options given below. Each blank can be filled with more than one option. Find the combination/s which can most suitably complete the sentence without altering the meaning of the statement.

109. One of the recurring issues is the disruptive role of technology and its debilitating _____ on the sustainability of good journalism. Some people tend to view these deliberations as a _____ attempt to reverse the trend. But those who are able to see beyond the usual binaries of new media and old media, and digital and analog, are worried about the growing power of carriers at the cost of content-producing organisations.
(I) conduct (II) influence
(III) provoking (IV) risky
(V) futile
(a) I-III (b) II-I (c) V-III
(d) II-V (e) No combination fits

110. Human traffickers play with the lives of people from South Asia, and North African human traffickers send tens of thousands of migrants every year via the Mediterranean to Europe. Scores of boats sink because they are usually of very low quality or are filled to _____ ; as a result, thousands die every year. According to some reports, more than 2,400 migrants drowned in the first half of 2017. In view of the _____ number of casualties, Amnesty International feared that 2017 could become "the deadliest year for the deadliest migration route in the world".
(I) maximum (II) brim
(III) overcapacity (IV) unprecedented
(V) II-I
(a) I-IV (b) IV-II (c) III-IV
(d) II-III (e) No combination fits

111. Specifically, in cases where companies have ended up struggling to service debt as a _____of unpredictable external factors that adversely impacted their operations and financials, barring the promoters of such firms from a chance to restructure and turnaround the business, merely because the loans have turned _____, is unfair to both the entrepreneur and the enterprise itself.
(I) Consequence (II) Sour
(III) Reverberation (IV) Result
(V) Fractious
(a) A-B (b) D-E (c) C-B
(d) D-B (e) No combination fits

Directions (112-114): Given below is a set of statements viz, (I), (II), (III), (IV) & (V). Read them to answer the question that follow without changing the tone of the paragraph.
(I) Although there is a thick alphabet soup of new organisations meant to fight terrorism, most are chronically under-resourced.
(II) India's intelligence services remain desperately short of resources, running some 30 per cent below officially-sanctioned staffing levels that were decided on before 26/11.
(III) There are chronic shortages of everything, from language and area specialists, to personnel with specialist technology skills.
(IV) India has been unable to fulfil its commitment to modernise basic policing and emergency services — the first responders at the time of a crisis.
(V) Forensics, investigation and intelligence capabilities are abysmal

112. Which among the following sentences can **REPLACE** Statement (II) IN CONTEXT completely?
(a) Time enough, perhaps, to ask if India, as a state and civil society, has learned anything from it other than to mourn.
(b) For all the fighting words 26/11 gave rise to, though, neither of these issues can be said to have been addressed in any meaningful way.
(c) It led to a distillation of public frustration with police and intelligence services, which seemed unable to protect India's citizens.
(d) The arrival of various fronts with their anti terrosim agenda can never undermine the fact that the government agencies responsible for the security of the nation are well below requirement, quantitatively and qualitatively.
(e) None of these

113. Which one of the following statements can be a suitable choice that FOLLOWS statement (V)?
(a) In March, Minister of State for Home R.P.N. Singh told Parliament that the IB had 18,795 personnel on its rolls, against a sanctioned strength of 26,867
(b) The organisation is short of some 130 management-level staff, the sources said, particularly cutting-edge under-secretaries and deputy secretaries.
(c) Put simply, the systematic nuts-and-bolts work needed to defend India has not been done.

(d) Long years of neglect, intelligence officials said, had contributed to the staffing crisis at the RAW and the IB.
(e) None of the above

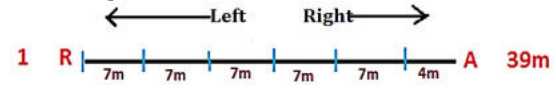
114. Which one of the following sentences can be placed in between Statement (III) and Statement (IV) without altering the context of the paragraph?
(a) The Research and Analysis Wing (RAW), officials said, faces endemic shortages of personnel both with specialist language and area skills, and technology experts critical to modern espionage.
(b) Figures show staff deficits are endemic across the intelligence services. IB had 18,795 personnel on its rolls, a shortfall of over 30 per cent.
(c) The most critical deficiencies, however, are in critical technology positions — the core of modern espionage.
(d) The Intelligence Bureau (IB), in turn, has been unable to expand its counter-terrorism efforts, despite mounting threats.
(e) None of the above

115. In the question given below, parts of sentences are jumbled up. Arrange them sequentially in order to form a correct, coherent sentence.
(a) The way children are reprimanded if their attention wanders as they learn how to focus, the same can be explained when training to e-read off while reading on paper
(b) off while reading on paper can be explained when training to e-read as they learn how to focus, the same if their attention wanders the way children are reprimanded
(c) if their attention wanders can be explained when training to e-read as they learn how to focus, the same the way children are reprimanded off while reading on paper
(d) as they learn how to focus, the same the way children are reprimanded off while reading on paper can be explained when training to e-read if their attention wanders
(e) The way children are reprimanded if their attention wanders off while reading on paper as they learn how to focus, the same can be explained when training to e-read.

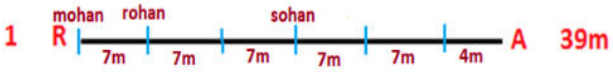
Solutions

REASONING ABILITY

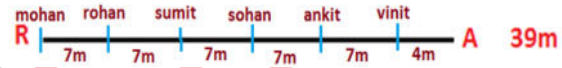
Direction (1-5):
Step I: Let us start with the detail solution. As given in the diagram that there is a line-1 RA and Six people Mohan, Sohan, Rohan, Ankit, Vinit and Sumit are standing in line 1-RA. All of them are facing north. With distance between them increasing in multiples of 7 from the left end (i.e. suppose Mohan is left end of the line at point R then the remaining people will stand at a distance as follows -7m, 14m, 21m…. from the end). So, the arrangement will be----



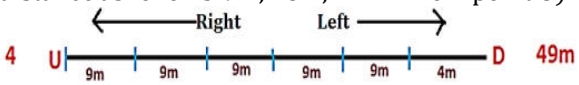
In this arrangement the distance between two persons standing next to each other is seven whereas from first person standing at left end the distance will be in multiple of 7. And as the total length of the line is 39m and all persons are standing in the line at a distance of multiple of 7 so it will be 35m, remaining distance will be 39-35=4m from the right end.
Step II: Now, let us start with the sitting arrangement of line 1-RA. Mohan is standing at the left end of the line. Two persons are standing between Mohan and Sohan. Rohan stand second to the left of Sohan.



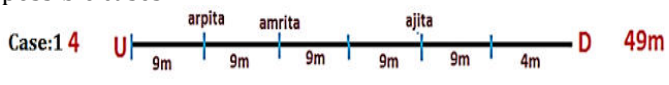
Step III: Sumit is an immediate neighbor of Rohan. Only one person stands between Sumit and Ankit. So, the final arrangement of line1-RA is---------



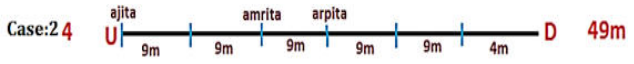
Step IV: Similarly, six people Anita, Ambika, Amrita, Aanchal, Arpita and Ajita are standing in line-4 UD. All of them are facing south. with distance between them increasing in multiples of 9 from the end (i.e. if first person is at right end of the line at point U and the remaining will be stand at the distance as follows-9m, 18m,27 m….from point U)



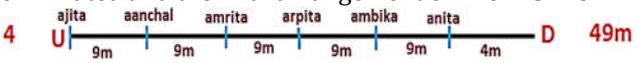
In this arrangement the distance between two persons standing next to each other is nine whereas from first person standing at right end the distance will be in multiple of 9. And as the total length of the line is 49m and all persons are standing in the line at a distance of multiple of 9 so it will be 45m, remaining distance will be 49-45=4m from the left end.
Step V: Amrita is standing is at 3rd position from the right end. Arpita is an immediate neighbor Of Amrita. Two people are standing between Arpita and Ajita. From this there can be two possible cases-----



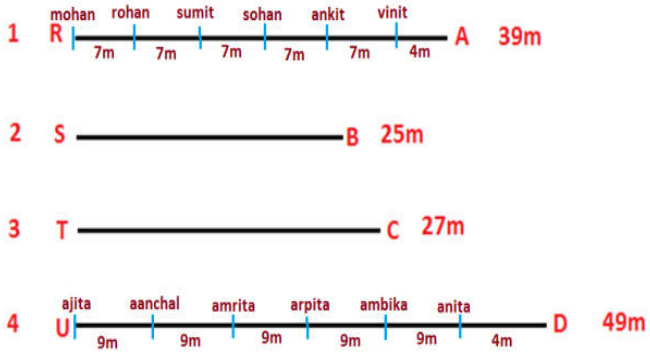
Case:2



Step VI: More than three persons stand between Ajita and Anita. Aanchal stands to the immediate left of Ajita. Ambika and Arpita are immediate neighbours. So, case-1 will be eliminated and the final arrangement of line 2-UD is-

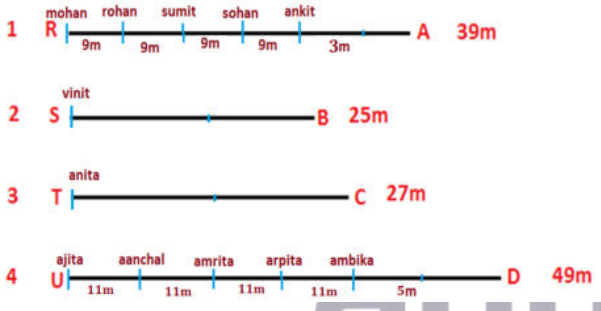


Now, final solution is----------

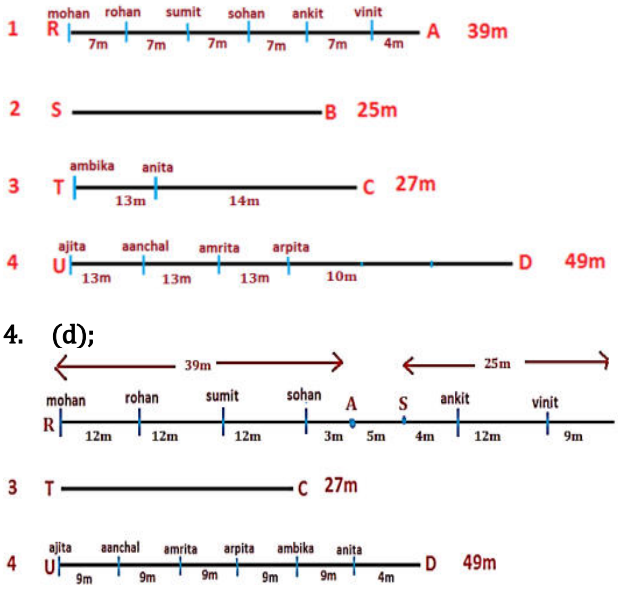


1. **(c);**

2. **(b);** As only five people can stand in both lines RA and UD at a distance in multiples of 9m and 11m respectively, So one person from each line will move to line 2-SD and line 3-TC respectively.

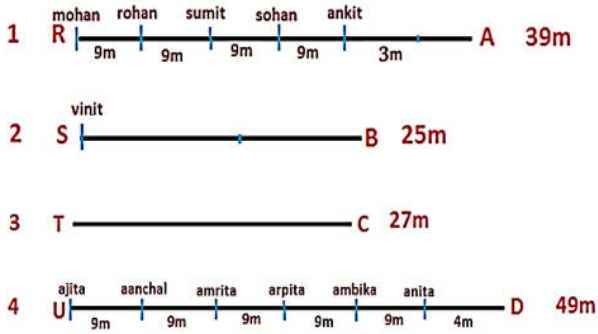


3. **(c);** As only four people can stand in line 4- UD at a distance in multiples of 13m, So two person from line 4-UD will move to line 3-TC respectively.



4. **(d);**

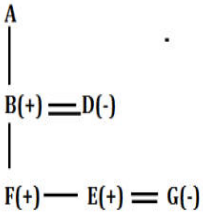
5. **(e);**



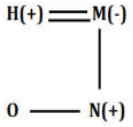
6. **(c);** Just because of builders who are indulge in profit business without caring about environment and poor people who suffers most and dies due to chronical diseases. And development of environment has lack behind due to rapid urban development. Thus, statement III is the cause, I and II are its effect.

7. **(c);** Note that we are talking about Smart Cities Mission. Thus, anything related to rural areas is beyond the scope. Whereas, in option (c), we focus only on urban development. Hence, option (c) will be an effect of the statement.

8. **(b);**



9. **(c);**



10. **(c);** (a) The method of guidance is irrelevant to the argument about free-wheel versus fixed linear systems

(b) The passage compares the speed and system models of airplanes and high-speed trains. The argument does not incorporate buses and cars, which are included only to give examples of free-wheel system, and so this statement is irrelevant.

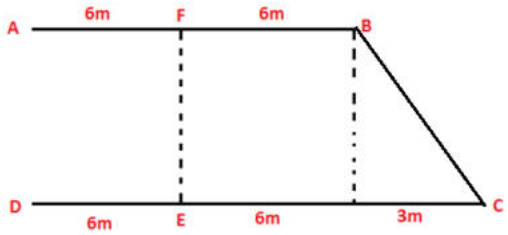
(c) **Correct.** This statement properly identifies the weakness in the argument: Airplanes are not truly a free-wheel system because they are restricted to traveling between airports. Additionally airports tend to be less conveniently located than train terminals, which has further potential to weaken the argument in favour of airpl

(d) The inability of high-speed trains to use some convenient train stations strengthens, rather than weakens, the argument in favour of airplanes.

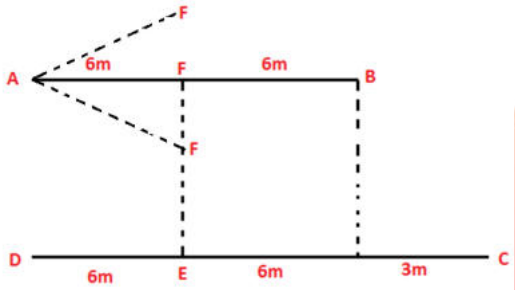
(e) Consumer preference for air travel over ground travel on long trips strengthens, rather than weakens, the argument in favor of airpl

Directions (11-15):

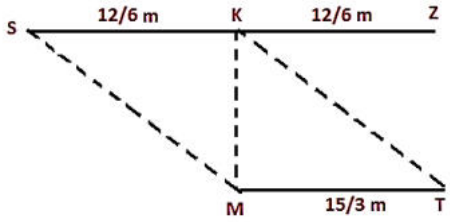
11. (d); It is given that DE < DC/2 so the value of DC = 15m and AB= 12m or 6m
D and A are inline so DE=AF,
If DE = 6m, EC = 15-6 = 9m
If DE= 3M, EC= 15-3 = 12m
It is given that EC<10 so DE= 6m and AB = 12m
Hence FB =6m



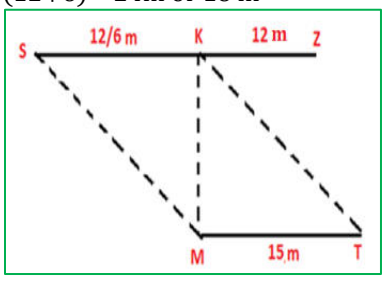
12. (e); The direction of F with respect to E is given but the exact distance from E is not given so we can't find out the exact position of F hence the direction of F with respect to A can't be determined.



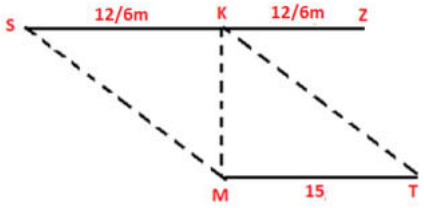
13. (a); There are four possible possibilities but two will cancel out by the condition that K is in east of S and K is in north of M so the final figure is given below.
It is clear that Z is in north east from M.



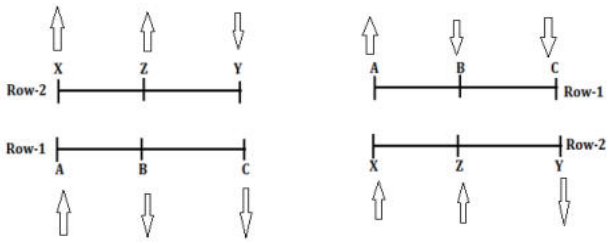
14. (d); It is given that MT>SK so MT=15m KZ= 12m and SK =12m or 6m so the value of SZ= (12+12) or (12+6)= 24m or 18 m



15. (d); It is given that MT>SK so MT=15m and SK =12m or 6m
SK + MT = (12+15) or (15+6) =27m or 21m



Direction (16-17):

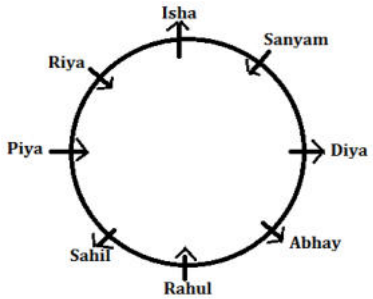


16. (a); **17. (a);**

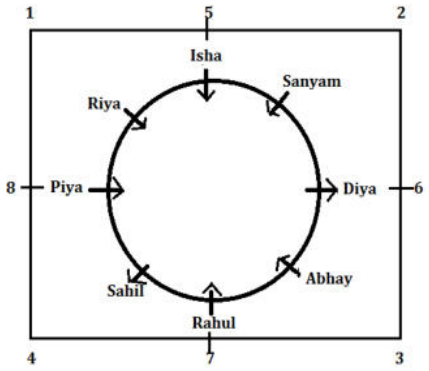
18. (d); Option (a) cannot be inferred because of the word – "only". Option (b) cannot be inferred as we cannot say that the ban was the only factor that led to an increase in the number of glaucoma patients in city Y. Option (c) cannot be inferred as the given drug could have been used for recreational use also. Option (d) can be inferred as the effectiveness of the given drug in the treatment of glaucoma could be the reason why the ban was lifted.

Direction (19-23):

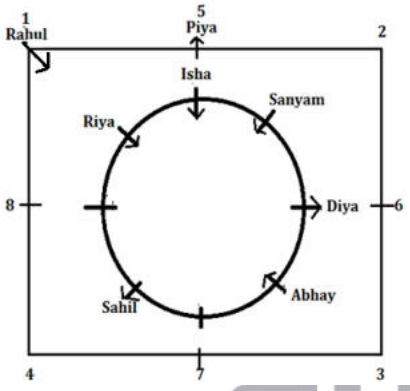
Step I: First let us start with seating arrangement of the circle. Eight persons Abhay, Isha, Riya, Rahul, Piya, Diya, Sahil, Sanyam are sitting around the circle having eight vacant chairs. Four of them are facing towards the center while four are facing outside the center.
Only two persons are sitting between Isha and Abhay. Sahil sits second right of Abhay. Rahul and Sahil are immediate neighbours. Riya sits third left of Rahul. Both Abhay and Isha are facing outside the center. Rahul is facing opposite direction of Isha. Piya sits immediate right of Sahil who is facing same direction as Abhay. Sanyam sits second left of Riya. Both Sanyam and Piya are facing same direction.



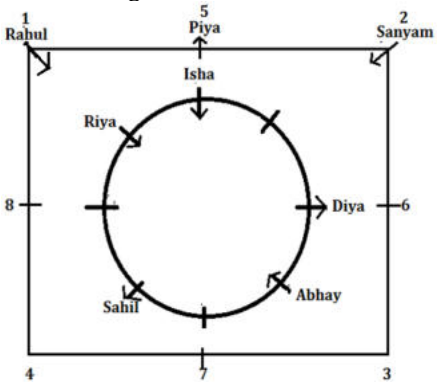
Step II: Now, according to the given conditions - 1. Isha draws queen of Club, 2. Abhay draws Jack of Club and If card drawn is club, person remains on the same position facing opposite direction of current direction. So, Isha and Abhay remains on the same position facing opposite direction of current direction.



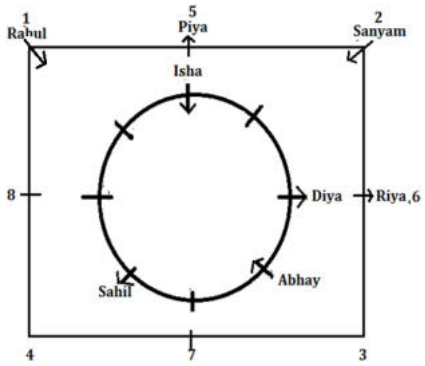
Step III: 3. Piya draws 3 of Spade, If the card drawn is spade, the person who draws first moves to position 5 facing opposite direction of current direction, then the second person who also draw spade moves to position 6, similarly 7 and 8. So, it is clear that Piya will move to position-5 and will now face outside the center. Further 4. Rahul draws a King of Diamond, If the card drawn is diamond, the person who draws first moves to corner 1 facing same direction, then the second person who also draw diamond moves to corner 2, similarly 3 and 4. So, it is clear that Rahul will move to corner-1 facing same direction.



Step IV: 5. Diya draws Ace of Heart, 6. Sahil draws 9 of Heart and If card drawn is heart, person remains on the same position facing same direction. So, both Diya and Sahil remains on the same position facing same direction. Further, Sanyam draws 7 of Diamond and If the card drawn is diamond, the person who draws first moves to corner 1 facing same direction, then the second person who also draw diamond moves to corner 2, similarly 3 and 4. Now, Sanyam will move to corner-2 facing same direction.



Step V: 8. Riya draws 4 of Spade, If the card drawn is spade, the person who draws first moves to position 5 facing opposite direction of current direction, then the second person who also draw spade moves to position 6, similarly 7 and 8. So, Riya will move to position-6 now facing outside the center. So, the final arrangement is----------



19. (d); 20. (b); 21. (c);

22. (e); 23. (b);

24. (d); Litter city has introduced a levy of Rs.100 on private cars entering the city. This levy is in addition to the toll already being levied. In the passage, the administration argues that this new levy will force people from not using their cars and to take public transport. The administration thinks that the decisive issue for car owners is saving money. If car owners are already paying more as toll charges than they would pay in bus fares, money is not the reason for their using the car. That means car owners are unlikely to change their way of commuting to save money. So, option (d) is the right answer. Taxi drivers' demand for rate hike is irrelevant to the argument, so (a) is ruled out. Option (b) is inapt because a comparison with the neighboring city doesn't point to a flaw in the argument. Present bus riders are irrelevant to the City's plan. So (c) is also inapt.

25. (e); Clear from the way the agitated guardians have protested against this newly introduced audio-visual aid of teaching methodology, they are unhappy with the new teaching methodology.

26. (c); Any new thing takes some time for its adjustment. So, school authority may defend themselves by saying this statement.

Direction (27-30):

In this new pattern coding decoding each letter, except vowel, is assigned a number from 1-8 So, B-1, C-2, D-3, F-4, G-5, H-6, J-7, K-8, L-1, M-2, N-3, P-4, Q-5, R-6, S-7, T-8, V-1, W-2, X-3, Y-4, Z-5.

Each vowel is assigned a different symbol as-%, #, $, @, &. So, for vowels the symbols are - A-$, E-%, I-#, O- @, U-&.

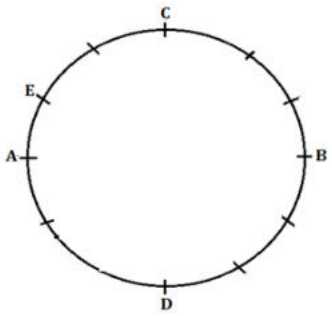
27. (d);

28. (a); The code will be- *3$* 2$7 *$7*

29. (c);

30. (b); The code will be- '786%3586 ** 5@3'

Direction (31-33):



31. (b); **32. (a);** **33. (c);**

Direction (34-35):

34. (e); From statement II- S can be married on either 28 January or 12 September.

From statement I and II- When S is married on 28 January

19/21Jan	28 Jan	31Jan	12Sep	19/21Sep
T	S	Q	V	R

When S is married on 12 September

31 Jan	12 Sep	19 Sep	21 Sep	28 Sep
T	S	Q	V	R

But it is given in statement II that More than three persons are married in the same month. So, we will get that S is married on 12 September and final arrangement from both statement I and II-

31 Jan	12 Sep	19 Sep	21 Sep	28 Sep
T	S	Q	V	R

35. (e);

Boxes	Colours
B	Orange
D	-
C	Blue
E	Green
F	Red
A	-

So, it is clear that, Box C is of Blue color.

From Statement I-

>	>	>	>B/E	> B/E
			12	10

From Statement II-

Total Number of toffees in box B+A= 31

Difference in Number of toffees in box F-E=7

Number of toffees in box F+8= Box contains highest number of toffees

Now combining both Statement I and II-

C	> D	> A	> F	> B	> E
25	21	19	17	12	10

So, Box C of Blue color contain 25 toffees.

Directions (36-40):

↑	↓	↓	↑	↓	↓	↑
N	O	P	Q	R	S	T
apple	banana	orange	kiwi	grapes	mango	guava

36. (c); **37. (d);** **38. (a);**

39. (b); **40. (e);**

41. (b); The argument in the given text is that the US president cannot sustain his legacy because of the slow progress of his initiative, i.e. 'securing nuclear materials', which, in other words, means that if he can speed up his initiative, he can have a lasting glory. So, the underlying assumption here is that whether one has a lasting glory or not depends on how fast their initiatives progress. The assumption comes out only in option (b). Hence, it is the right answer.

Direction (42-45): In this new pattern coding decoding question only one word and one number is arranged in each step. Let us understand the logic behind it- In each step the words and the numbers both are arranged from the left end. For words- The word which has highest place value according to alphabetical series is arranged first from left end and each letter of each word is replaced by its second succeeding letter according to alphabetical series and same will be followed in each step. For numbers- Numbers are arranged in descending order from left end in such a way that each number is multiplied by two.

Input- olpu htqs 21 73 48 9 xcek bdgv

Step I: zegm 146 olpu htqs 21 48 9 bdgv

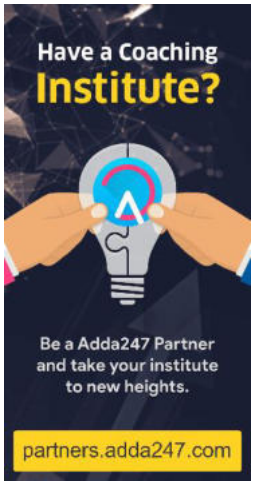
Step II: qnrw 96 zegm 146 htqs 21 9 bdgv

Step III: jvsu 42 qnrw 96 zegm 146 9 bdgv

Step IV: dfix 18 jvsu 42 qnrw 96 zegm 146

42. (c); **43. (d);** **44. (a);**

45. (b);



QUANTITATIVE APTITUDE

46. (b); Let no. of contestants who have not completed online survey = x
⇒ No. of contestants who have not completed offline survey = 1.125x
ATQ—
x + 1.125x = 153
⇒ 2.125x = 153
⇒ $x = \frac{153}{2.125} = 72$
No. of contestants who completed offline survey
$= \frac{792}{55} \times 45 - 72 \times 1.125 = 648 - 81 = 567$
No. of contestants who completed online survey
= 792 – 72 = 720
Required% $= \frac{567}{720} \times 100 = 78.75\%$

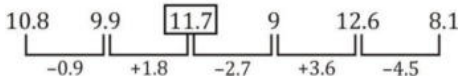
47. (e); Online contestants who have not completed the survey
$= \frac{35}{100} \times 120 = 42$
Offline contestants who have not completed the survey
$= \frac{65}{100} \times 120 = 78$
Total no. of offline contestants
$= \frac{630}{42} \times 58 = 870$
Online contestants who have completed the survey = 630 – 42 = 588
Offline contestants who have completed the survey = 870 – 78 = 792
Required difference = 792 – 588 = 204

48. (b); Contestants who have not completed online survey
$= \frac{10}{17} \times 306 = 180$
Contestants who have not completed offline survey
$= \frac{7}{17} \times 306 = 126$
Contestants who completed online survey
= 1185 – 180 = 1008
Contestants who completed offline survey
$= \frac{1188}{72} \times 28 - 126 = 462 - 126 = 336$
Required ratio $= \frac{336}{1008} = \frac{1}{3}$

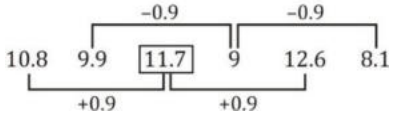
49. (a); Total number of contestant in village Q who completed survey
$= \frac{792}{55} \times 100 - 153 = 1440 - 153 = 1287$
Total number of contestant in village P who completed survey
$= \frac{486}{36} \times 100 - 45 = 1350 - 45 = 1305$
Required difference = 1305 – 1287 = 18

50. (d); Total contestants of village M who have completed the survey
$= \frac{576}{48} \times 100 - 96 = 1200 - 96 = 1104$
Total contestants of village N who have completed the survey
$= \frac{630}{42} \times 100 - 120 = 1500 - 120 = 1380$
Required % $= \frac{1104}{1380} \times 100 = 80\%$

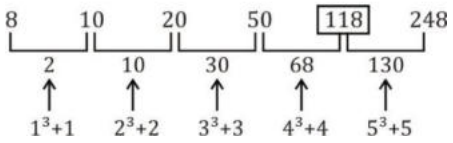
51. (d);



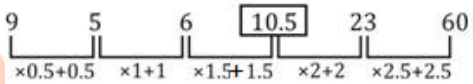
Alternate



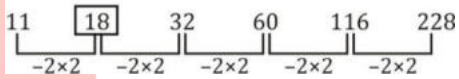
52. (a);



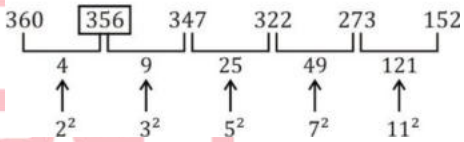
53. (c);



54. (e);



55. (d);



Solutions (56-60): Total number of vehicles on Tuesday = 12,000
Let number of vehicles on highway X, Y and Z on Tuesday be a, b and c respectively.
ATQ,
$\frac{a+c}{2} = b$ ... (i)
And, a + b + c = 12,000 ... (ii)
On solving (i) and (ii), we get
B = 4,000
Number of vehicles on highway Y on Monday
$= \frac{4000}{20} \times 18 = 3600$
Number of vehicles on highway Y on Wednesday
$= \frac{4000}{20} \times 27 = 5400$
Number of vehicles on highway Z on Monday
$= \frac{3600}{9} \times 10 = 4000$
Number of vehicles on highway Z on Tuesday
$= \frac{125}{100} \times 3600 = 4500$
Number of vehicles on highway X on Tuesday
= 12000 – 4500 – 4000 = 3500

Total no. of vehicles on highway X on Monday, Tuesday and Wednesday together = 3300 × 3 = 9900
Let, 'P' be the no. of vehicles on highway X on Wednesday.
ATQ,
$P + \frac{3}{5}P + 3500 = 9900$
$\Rightarrow P = 4000$
$\frac{3}{5}P = 2400$
Number of vehicle in highway Z on Wednesday
$= 2400 \times \frac{11}{4} = 6600$

Day \ Highway	X	Y	Z
Monday	2400	3600	4000
Tuesday	3500	4000	4500
Wednesday	4000	5400	6600

56. (b); Total no. of vehicles on highway Z on all the three days together
= 4000 + 4500 + 4600 = 15100
Total no. of vehicles on highway Y on all the three days together
= 3600 + 4000 + 5400 = 13000
Required difference = 15100 – 13000 = 2100

57. (d); Required value
$= 4000 \times \frac{110}{100} + 5400 \times \frac{115}{100} + 6600 \times \frac{125}{100}$
$= 4400 + 6210 + 8250 = 18{,}860$

58. (a); Required ratio $= \frac{3500}{4000} = \frac{7}{8}$

59. (c); Required % $= \frac{6600-4000}{4000} \times 100$
$= \frac{2600}{4000} \times 100 = 65\%$

60. (e); Required difference $= 4500 \times \frac{75}{100} \times \frac{20}{100}$
= 675

61. (a); $\frac{a}{b} - \frac{b}{a} = \frac{11}{30}$
$\Rightarrow \frac{a^2-b^2}{ab} = \frac{11}{30}$ ... (i)
On solving eq (i), we get
Value of a, b can be 6x and 5x respectively where x can be any integer other then zero but because a and b both +ve integer and less than 8 ⇒ a = 6, b = 5
Quantity I = a – 4 = 6 – 4 = 2
Quantity II = $(a + b)^2 - 4ab$
$= (6 + 5)^2 - 4 \times 6 \times 5 = 121 - 120 = 1$
Quantity I > Quantity II

62. (a); Value of X can be 4, 5 and 6
Quantity I: Probability of choosing one green ball from the box depends on the value of X.
If X = 4, Required Probability $= \frac{4}{14} = \frac{2}{7}$
If X = 5, Required Probability $= \frac{5}{15} = \frac{1}{3}$
If X = 6, Required Probability $= \frac{6}{16} = \frac{3}{8}$
Quantity II: Probability of choosing one red ball and one blue ball from the box also depends on value of X.
If X = 4, Required Probability $= \frac{3}{14} \times \frac{7}{13} \times 2$
$= \frac{3}{13}$
If X = 5, Required Probability $= \frac{3}{15} \times \frac{7}{14} \times 2$
$= \frac{1}{5}$
If X = 6, Required Probability $= \frac{3}{16} \times \frac{7}{15} \times 2$
$= \frac{7}{40}$
Quantity I is always greater than Quantity II
Quantity I > Quantity II

63. (b); DE ∥ BC ⇒ ∠ABC = ∠ADE and ∠AED = ∠ACB.
BE is bisector on ∠DEC ⇒ ∠DEB = ∠BEC
Let ∠EAB = x
x + 0.5x = 180 – 60
1.5x = 120
⇒ x = 80° = ∠CAB
⇒ 0.5x = 40° = ∠ACB
⇒ ∠AED = ∠ACB = 40°
⇒ ∠EDB = 360 – 60 – 40 – 140 = 120°
and ∠BEC = ∠DEB $= \frac{140}{2} = 70°$
Quantity I: ∠AEB = 40 + 70 = 110°
Quantity II: ∠BDE = 120°
Quantity II > Quantity I

64. (e); Let, A alone can complete the work in x days.
ATQ,
B can complete the work alone in
$x \times \frac{4}{5} = \frac{4}{5}x$ day
And, 'C' can complete the work alone in
$x \times \frac{4}{3} = \frac{4x}{3}$ days
ATQ,
$\frac{1}{x} + \frac{5}{4x} + \frac{3}{4x} = \frac{1}{5}$
$\frac{4+5+3}{4x} = \frac{1}{5} \Rightarrow x = \frac{12\times5}{4} = 15$
A, B and C alone can complete the work in 15, 12 and 20 days respectively.
Quantity I:
Required time $= \frac{1}{2}\left[\frac{15\times12}{15+12}\right] = \frac{10}{3}$ days
Quantity II:
Required time $= \frac{100}{225}\left[\frac{20\times12}{12+20}\right] = \frac{10}{3}$ days
Quantity I = Quantity II

65. (c); $a^{4x} = 81^x \Rightarrow a = \pm3$
$b^{3x} = -27^x \Rightarrow b = -3$
Quantity I: a + b – 3
When a = +3when a = –3
I = + 3 – 3 – 3 = – 3 I = – 3 – 3 – 3 = –9
Quantity II:
When a =+3 – |ab| = – |(+3)(– 3)| = – |– 9| = –9
When a = –3 – |ab| = – |(– 3)(– 3)| = – |– 9| = –9
Quantity I ≥ Quantity II

66. (d); From both I and II.
I → 20% of boys = 30% of girls
II → Total girls $= \frac{70}{70} \times 100 = 100$
From I and II
Total boys $= \frac{30}{20} \times 100 = 150$
⇒Both statements are required.

67. (a); From I only.
Let rotten egg → a
So,
$\frac{^{a}C_2}{^{10}C_2} = \frac{2}{15}$
$\Rightarrow {}^{a}C_2 = 2x$ & $^{10}C_2 = 15x$
$^{10}C_2 = 15x \Rightarrow x = 3$
$\frac{a.(a-1)}{2} = 6$
$a = 4, -3;$
rotten egg = 4
From I we can find the probability.

68. (b); From II only
II Let sum → P
ATQ,
$4P = P\left[1 + \frac{r}{100}\right]^2 \Rightarrow r \Rightarrow 100\%$

69. (d); Both I and II required
I. Let smallest and largest number be a and b respectively.
$a + b = 50$
Second largest number = 91 – 50 = 41
$41 - a + b - 41 = 40$
$b - a = 40$
$\Rightarrow a = 5$ and $b = 45$
Both statement required.

70. (a); Only from (i)
∴ If a triangle and a quadrilateral have same base and lie between same parallels then area of triangle is equal to half area of quadrilateral
∴ Area of triangle $= \frac{1}{2}$ Area of Rhombus

71. (a); Let A, B, C present ages be x, y, z respectively.
$x + y + z = 96$ ... (i)
ATQ,
$\frac{x+2}{y+2} = \frac{5}{7}$
$7x + 14 = 5y + 10$
$-7x + 5y = 4$ ... (ii)
Also,
$\frac{z-1}{y+1} = \frac{17}{9}$
$9z - 9 = 17y + 17$
$9z - 17y = 26$ ... (iii)
From (i), (ii) and (iii), x = 18, y = 26, z = 52
A's age after 8yrs = 18 + 8 = 26 yrs.

72. (c); ATQ,
$2r + R = 42$ ... (i)
Let radius of another circle be x.
$2\pi x = \frac{300}{100}[2\pi r + \pi R]$ ... (ii)
From (i) and (ii),
x = 63 cm

73. (a); Let C.P of table = Rs. x, and C.P. of chair = 1500 – x
S. P. of table $= \frac{130}{100}x$ ... (i)
S. P. of Chair $= \frac{120}{100}(1500 - x)$ ... (i)
Total S. P. $= \frac{130x}{100} + \frac{120}{100}(1500 - x)$
$= \frac{x}{10} + 1800$
Total Profit $= \frac{x}{10} + 1800 - 1500 = \frac{x}{10} + 300$
ATQ,
$\frac{\frac{x}{10}+300}{\frac{130}{100}x} = \frac{100}{300}$
$\frac{3x}{10} + 900 = \frac{130x}{100}$
x =900
C.P of chair=1500-900=Rs 600

74. (b); Let quantities in vessel A be 13x and in vessel B be 11x
Let quantity of milk in each vessel be y.
Water in vessel A ⇒ 13x – y = 40 ... (i)
Water in vessel B ⇒ 11x – y = 30 ...(ii)
From (i) and (ii)
x = 5
y = 25.
Required ratio $= \frac{50}{70} = 5 : 7$

75. (d); ATQ,
Efficiency of A $= \frac{6}{5}$B.
Efficiency of A $= \frac{3}{2}$C
Ratio of time taken by A and B = 5 : 6
Ratio of time taken by A and C = 2 : 3
Ratio of time taken by A, B and C = 10 : 12 : 15
Let time taken by A, B and C be 10x, 12x and 15x respectively.

Efficiency		Total work
6	← A → 10x	60x
5	← B → 12x	
4	← C → 15x	
15		

A + B + C will complete work in $\frac{60x}{15} = 4x$ days
ATQ, $4x = 24 \Rightarrow x = 6$
B alone will complete work in $= \frac{60\times6}{5} = 72$ days.

76. (b); Lets C.P of article C = 900
S.P of article 'C' on Monday $= 900 \times \frac{65}{100} = 585$
Cost price of article 'C' $= \frac{585}{130} \times 100 = 450$
Cost price of article 'A' $= \frac{450}{9} \times 8 = 400$
Total cost price = 400 + 400 = 800
Total S.P of article 'A' $= 720 \times \frac{85}{100} + 720 \times \frac{75}{100}$
$= 612 + 540 = 1152$
Profit % $= \frac{1152 - 800}{800} \times 100 = \frac{352}{800} \times 100 = 44\%$

77. (e); Let mark price of article 'D' = x
ATQ,
$x \times 0.825 = 0.625 \times 0.88 \times 1200 \Rightarrow x = 800$
Selling price of article 'D' on Monday
$= 800 \times \frac{90}{100} = 720$

Cost price of article 'C' $= 720 \times \frac{75}{100} = 540$

S.P of article 'C' on Tuesday $= 900 \times \frac{78}{100} = 702$

Profit of Seller $= 702 - 540 = 162$

78. (d); Let mark price of article 'B' $= 7x$

$\Rightarrow$ Let mark price of article 'D' $= \frac{8}{7} \times 7x = 8x$

Cost price of article 'B' $= \frac{7x \times 80 \times 100}{140 \times 100} = 4x$

Cost price of article 'D' $= 8x \times \frac{90}{100} \times \frac{100}{144} = 5x$

Required ratio $= \frac{4x}{5x} = \frac{4}{5}$

79. (c); Let, C.P of article B $= x$

C.P of article D $= 820 - x$

Let, M.P of article B $= y$

M.P of article D $= 1400 - y$

ATQ,

$y \times \frac{76}{100} = \frac{142.5}{100} \times x$

$\frac{y}{x} = \frac{15}{8}$ ... (i)

And,

$(1400 - y) \times \frac{90}{100} = \frac{144}{100} \times (820 - x)$

$\frac{1400-y}{820-x} = \frac{8}{5}$

$5(1400 - y) = 8(820 - x)$

$\Rightarrow 5y - 8x = 7000 - 6560$

$\Rightarrow 5y - 8x = 440$ ... (ii)

On solving (i) & (ii)

$x = 320 \Rightarrow y = 600$

Required % $= \frac{720}{800} \times 100 = 90\%$

80. (c); Selling price of article 'A' on Tuesday

$= 720 \times \frac{75}{100} = 540$

Selling price of article 'C' on Tuesday

$= 900 \times \frac{78}{100} = 702$

Selling price of article 'E' on Tuesday

$= 1200 \times \frac{82}{100} = 984$

Required average $= \frac{540+702+984}{3} = \frac{2226}{3} = 742$

ENGLISH LANGUAGE

81. (d); The passage describes the research by Daniel Kehneman and Amos Tversky's into the measurement of judgement and decision-making. The passage states that Intelligence quotient (IQ) is not enough to explain how "people make choices and assess probabilities, the (the) basic errors that are typical in decision-making," and that "rational thinking skills are totally dissociated from intelligence." Hence option (d) best describes the passage.

82. (d); B and E. A is incorrect because they (IQ tests) do not measure rational thinking skills, hence is not a measure of cognitive functioning. B is correct in this respect. C is incorrect because they do measure intelligence, and the passage states that intelligence does not include rational thinking skills. D is incorrect because IQ tests are used to determine this suitability almost everywhere. They may be inadequate tools but they do not "ignore" as the option suggests. E is correct right action arises from rational thinking—IQ tests cannot measure these skills.

83. (e); None of the above. The passage supports none of the inferences. A—People with rational thinking/decision-making skills may not be dissatisfied with their lives at all. B—IQ tests do measure one's intelligence; the writer's complaint is that decision-making abilities are not assessed by IQ tests. C—The writer states that such tests can be designed, but finance may be the only constraint. D—The passage does not clearly support this inference; passage suggests that a combination of IQ and RQ may be necessary. D—The passage does not support this inference; it is the lack of rational thinking skills that (may) give/s rise to over-confidence and higher IQ.

84. (e); None of the options help make the thesis less supportable. Options (a) and (b) may confuse. But the thesis of the passage is rational judgments are unrelated to intelligence. Hence when the options say success or failure of rational judgements has no relation (imperfectly correlated) to intelligence, this is exactly what the passage states. Hence these (a) and (d) would further strengthen the thesis. Option (b) does not weaken the lack of correlation between intelligence and rational decision-making skills. Option (c) is irrelevant to the thesis. Hence the answer is option (e).

85. (e); Big or small mistakes made in a parlour game are not the area of study mentioned in the passage. Hence it is not an example of thinking error. Options (b) to (d) are all correct ways of thinking. Overconfidence is a thinking error option (c) and the passage does not say that confidence is thinking error. Hence option (c) is not the answer. Evaluation of alternatives and short term and long term perspectives option (d) and (e) are rational thinking skills not thinking errors.

86. (c); The passage is about how engineers have been stretching a particular technology or design almost until it fails. The writer says that works at a small level—in the beginning—does not necessarily work at greater level. A design that works should not be stretched to its limits—which results in failure of that design. IN the case of bridges this has been happening with almost regular intervals. The last sentence of the passage will fully justify option (c).

87. (e); Though all the answer options are partially true, the question asks you to find out the "real" reason behind the regularity of bridge failures. We need to then rank these choices with the help of the details available in the passage. The passage after analysing the possible

reasons almost concludes that "... things that work on a small scale do not necessarily work when slightly larger." The writer then cites the example of ship building, too. Hence this can be the most likely reason for the bridge collapses. Hence the answer is option (e).

88. (c); The last two paragraphs of the passage discuss the type of technique that is widely used for bridges currently — which is the suspension or cable-stayed bridges. The writer states that this technique may be in danger of being stretched and if the engineers do not learn from their mistakes made earlier, the collapse of next bridge may be expected around 2030 if the cycle holds true and may happen to a cable-stayed or suspension bridge. Hence option (c). This is a very straightforward application question.

89. (d); The answer to this question comes from the paragraph beginning, "Failures always reveal ……" Options (a and b) are too broad and the writer does not imply that engineering failures can reveal "mankind's" weaknesses or its incomplete understanding of the world as a whole. The writer is not philosophical about the engineering failures. Options (c) is wrong because it talks about the 'limitations of phenomena"—whereas it is engineers' limitations they are sensitized to. The paragraph states that "... engineers were sensitized to
their own limitations and so approached subsequent designs with renewed respect for the laws and forces of nature. This is what option (d) states, and hence the answer. All of the above is automatically eliminated as there are wrong options.

90. (b); In the earlier sentence the writer talks about building "new bridges" implying these may be new but based on the same designs as of the earlier ones. Then he states the quoted sentence, implying these designs not only new but original (unprecedented) as well. This makes option (b) close to the intended meaning.

91. (d); Endearment- a word or phrase expressing love or affection, love or affection. Tenderness best expresses the meaning.

92. (c); Verve-vigour and spirit or enthusiasm.
synonyms- enthusiasm, vigour, energy, pep, dynamism, vitality, vivacity, buoyancy.

93. (c); Fulmination-an expression of vehement protest, an explosion or a flash like lightning. The word most opposite in meaning is compliment.

94. (c); Saboteur-destruction of an employer's property (such as tools or materials) or the hindering of manufacturing by discontented workers. The word most opposite in meaning is ally.

95. (d); Option D is the correct choice.

96. (b); Option B is the correct choice.

97. (e); Option E is the correct choice.

98. (a); Option A is the correct choice.

99. (d); Option D is the correct choice.

100. (b); Option B is the correct choice.

101. (b); Replace "has" with "have".

102. (e); No error

103. (c); There is an error in C option. Replace "is" with "are". Plural verb should be used here …that 'are' essential to achieve this objective.
Also do not get confused with "not only" case, there is no error in this.
Case of 'not only' 'but also'- When but is included you can either add 'also' (or its alternatives) or not; both forms are common and standard. Hence the parentheses in but (also), which could also be written as (but) also, since but sometimes doesn't appear either.
For example-
''Rowers not only face backward, they race backward.''
This sentence is effective because of its succinctness and punchy rhythm. Adding but would impair it, while adding also would do little or nothing to improve it. Doing without 'but' or 'also' tends to reduce formality, or to reduce stiffness in formal prose, and can benefit short and straightforward constructions.
For example -
"The street door of the rooming-house was not only unlocked but wide open"
'But (also)' can appear by itself, without being preceded by 'not only'.

104. (b); There is an error in Part B. Replace "later" with "latter". Use later when referring to time. Use latter when referring to the second of two persons or things mentioned previously. Hence 'Latter' should be used here.

105. (d); Correct choice is option D.

106. (d); Option D is the correct choice. C and D is the correct combination. The paragraph suggests that increase in noise level should not go higher and a noise control plan should be prepared.

107. (d); In this question, Option B and D can be easily ruled out when we connect them with "ALONGWITH". Hence the logical answer after eliminating B and D is of A-C, i.e.; option D.

108. (a); Correct choice is Option A.

109. (d); Influence and futile gives the paragraph a coherent meaning.

110. (c); III-IV is the most appropriate combination of words here. Several boats sink because they are filled more than the limit they can carry.

111. (d); Correct combination is D-B. i.e; IV and II.

112. (d); Option D is the correct which replaces statement II in best way.

113. (c); Option C is the most appropriate choice that follows statement V. It concludes the discussion in best way providing a coherent meaning to it.

114. (b); Statement B complements III in best way. III highlights "chronic shortage of area specialists…" which B explains further.

115. (e); Correct choice is option E. Option B, C and D can be easily ruled out as they have incorrect sentence structure. Between A and option E, we can eliminate A as "when to re-read off while reading on paper…" here use of read off is incorrect and in comparison choice E has more coherent meaning.

REASONING ABILITY

Directions (1-5): Seven persons of the family A, B, C, D, E, F and G. Each of them is a Teacher, Doctor, Patient, Lawyer, Dentist, Engineer and Accountant. They like different fruits- Orange, Banana, Apple, Grapes, Papaya Litchi and Raspberry colour but not necessarily in the same order. Their hobbies are Watching TV, Fishing, Hunting, Shopping, Sleeping, Sewing and Entertaining but not necessarily in the same order. Three of them preferred Limca and remaining all preferred Thumps up. There is two married couple in the family and three generations.
The person whose hobby is Sleeping preferred Limca while who is the Dentist preferred Thumps up. E's wife is the Doctor and likes Papaya. Patient does not like Litchi and Grapes. The two members who took Limca were the person whose favourite fruit is Papaya and the one whose hobby is Entertaining. B's husband did not take Limca and his favourite fruit is Orange. E's mother's favourite fruit is Banana and she did not like Limca and she likes to play hunting. F's father-in-law sees a program in TV. Neither A nor the one who likes raspberry likes limca.G's grandmother is a Teacher. The person whose favourite fruit is Apple likes Shopping but he is not E and the person who is Dentist likes Fishing. D is not a Patient. E has only two sons. The person who likes Apple is either Patient or Lawyer. The person who is a Teacher likes Banana and she is not preferred Limca. The entertainer person's favourite fruit is Litchi and he is neither Engineer nor Accountant. C, who is the grandson of D and his favourite fruit, is Raspberry and his hobby is not Sewing or Shopping. E is Engineer, his hobby is not Shopping, Hunting or Fishing and he preferred Limca. A is the daughter of B. F's hobbies is not sleeping. G is not a patient.

1. Which of the following fruit is liked by A's father?
(a) Papaya (b) None of these
(c) Grapes (d) Orange
(e) Banana

2. Who among the following person is Dentist?
(a) F's father (b) F's brother-in-law
(c) F's son (d) None of these
(e) G's brother

3. How is F related to B?
(a) Son (b) None of these
(c) Daughter (d) Son-in-law
(e) Daughter-in-law

4. Which among the following person's profession is Teacher?
(a) The person, who likes Banana.
(b) The person, whose hobby is Sleeping.
(c) The person, whose hobby is Hunting.
(d) Both (a) and (c)
(e) The person, whose likes Grapes.

5. A's sister-in-law likes which of the following fruit?
(a) Papaya (b) None of these
(c) Litchi (d) Grapes
(e) Banana

6. In an attempt to check its increasing pollution, Litter City has introduced a levy of Rs. 100 on every private car entering the city. The administration argues that the imposition of this levy, in addition of the existing toll at the entrance of the city, will switch people from using their cars to using the public transport.
Which of the following, if true, provides the best evidence that the city administration's argument is flawed?
(a) The city administration is already facing the ire of taxi drivers whose demand for a rate hike was turned down by the administration.
(b) A recent survey has shown that people living in Litter city have fewer cars than those in the neighboring clean city.
(c) Hardly 10% of the regular bus passengers own their own cars.
(d) The recent hike in the toll for cars already makes it more expensive for people to take a private car into the city than travel in a public transport.
(e) Both (a) and (d)

7. In Delhi, The BJP won all seven seats during the Loksabha elections, but it got an expected and unprecedented drubbing in the 2015 assembly polls. The party was able to win only three out of seventy seats.
Which of the following can be logically concluded from the passage above?
(a) Voters have learned to shock the party that has not kept its electoral promises.
(b) States can buck the national trend in an election.
(c) Voters have started electing their representatives as per the horses-for-courses principle.
(d) Political parties exploit the prevailing conditions in the state to win an election.
(e) Both (c) and (d)

8. Hundreds of genetically modified mosquitoes that are incapable of spreading the malaria parasite to humans have been created in a laboratory as part of a radical approach to combating the disease. The move marks a major step towards the development of a powerful technology called a "gene drive" that aims to tackle the disease by forcing anti-malarial genes into swarms of wild mosquitoes. The procedure can rapidly transform the genetic makeup of natural insect populations, making it a dramatic new tool in the fight against an infection that still claims over 400,000 lives a year.
The conclusion here depends on which of the following assumptions?
(a) Gene drive technology has great potential to help tackle malaria.
(b) Drug and insecticide resistance are eroding recent successes in managing malaria.
(c) This technology can be considered for other human diseases and infections that devastate crops.
(d) The modified insects will breed with normal mosquitoes and pass the anti-malarial genes on to their young.
(e) None of these

9. The US President has downsized his country's nuclear arsenal, helped to negotiate a deal to halt Iran's nuclear-weapons programme and led a global initiative to secure radioactive materials. But his legacy on nuclear issues remains uncertain, as the progress in securing nuclear materials has been slow.
Which of the following is an assumption of the speaker?
(a) There could be a break in the president's initiative at securing radioactive materials.
(b) One's lasting fame depends on the velocity with which one's initiatives are carried out.
(c) The deteriorating progress will eventually lead to the failure of the initiative.
(d) The US can never convince a country to give up its nuclear initiatives.
(e) None of these

10. The sales manager of a car manufacturing company reported a 23.2 per cent decline in domestic sales over the last one year. However, the profits of the company went up by 15 per cent over the same period.
Which of the following, if true, would resolve the above paradox?
(a) The company received additional orders for its products.
(b) The company sold more low-end, less expensive cars.
(c) The company could sell a record number of highly-remunerative sports utility vehicles.
(d) The company fudged its sales reports.
(e) None of these

Directions (11-15): Study the following information carefully and answer the questions given below.
In an annual function of a college five friends P, Q, R, S and T participated in car racing competition. All of them covered different distances. The distances were 27, 29, 31, 33 and 35 kilometer, but not necessarily in the same order. The rank obtained by each person is not necessarily related to the amount of distance covered by them. Similarly, the color of shirt of each person was different. Shirt colors were black, blue, brown, green and red. Each person was called for racing one by one. Q and the person who was given the chance at fifth position to drive, covered more than 30 Kilometers, and neither of the two was in blue shirt. R 's shirt was green, he drove immediately before the person who got the first rank. The person who drove fourth, was in red shirt and ran the car two kilometer less than the person who ran the car only after one person. T was called first to drive, but he did not get the last rank. One who drove immediately after P was in brown shirt. S was not the person who covered 31 or 35 kilometers. The person in black shirt did not cover 31 kilometers. The person in blue shirt did not obtain 2nd or 4th rank. Ranking of R is the same as the position at which the one who covered 27 kms drove. Ranking of S is not lower than that of the one with red shirt. P did not drive at 2nd position.

11. Which of the following persons is in brown shirt?
(a) S (b) T
(c) Q (d) Data Inadequate
(e) None of these

12. Who among the following persons got the first rank?
(a) Q (b) P
(c) R (d) Data inadequate
(e) Other than these options

13. Which of the following correctly shows the positions at which the following persons drove?
P Q R S T
(1) 4 3 2 5 1 (2) 4 3 2 1 5
(3) 3 4 2 5 1 (4) 4 2 3 1 5
(a) 1 (b) 2
(c) 3 (d) 4
(e) Other than these options

14. Which of the following correctly shows the order of the ranks obtained by the following persons?
P Q R S T
(1) 1 5 2 4 3 (2) 1 5 4 2 3
(3) 5 1 4 2 3 (4) 5 4 1 2 3
(a) 1 (b) 2
(c) 3 (d) 4
(e) Other than these options

15. Who among the following persons got the last rank?
(a) P (b) Q (c) R
(d) S (e) T

Directions (16-20): Study the following information carefully and answer the questions given below. Following are the conditions for selecting Marketing Manager in an organization. The Candidate must-

I. Be a Graduate in any discipline with at least 55% marks.
II. Have secured at least 40% marks in the selection interview.
III. Have post qualification work experience of at least five years in the Marketing division of an organization.
IV. Have secured at least 45% marks in the selection examination.
V. Have a post Graduate degree/diploma in Marketing-Management with at least 60% marks.

In the case of candidate who satisfies all the conditions except

(ii) II above, but has secured at least 60% marks in the selection examination, the case is to be referred to VP-Marketing.
(iii) III above, but has post qualification work experience of at least three years as Deputy Marketing Manager, the case is to be referred to GM-Marketing.

Give answer-

(a) Candidate is to be selected.
(b) Candidate is not to be selected.
(c) Case is to be referred to GM-Marketing.
(d) Case is to be referred to VP-Marketing.
(e) Data provided is not adequate to take a decision.

16. Nidhi Agarwal secured 60% marks in the selection interview and 40% marks in the selection examination. She has been working in the marketing division of an organization for the past eight years after completing her Post Graduate degree in Marketing-Management with 65% marks. She has secured 59% marks in B. Sc.

17. Prakash Verma has secured 56% marks in B.B.A. He has been working in the Marketing division of an organization for the past seven years after completing his Post Graduate degree in Marketing with 62% marks. He has secured 62% marks in the selection examination and 38% marks in the selection interview.

18. Tanya Goyal has been working for the past four years as Deputy Marketing Manager in an organization after completing her Post Graduate diploma in Marketing-Management with 65% marks. She has secured 45% marks in both selection examination and selection interview. She has also secured 58% marks in B. Com.

19. Aniket Kumar has secured 65% marks in B. Sc. And 60% marks in Post graduate degree in Marketing-Management. He has also secured 50% marks in both selection examination and selection interview. He has been working in the Marketing division of an organization for the past six years after completing Post Graduation in Marketing.

20. Varsha Singh has secured 59% marks in BA. She has secured 42% marks in the selection interview and 48% marks in the selection examination. She has been working in the Marketing division of an organization for the past seven years after completing her Post Graduation in Marketing- Management with 75% marks.

21. Twenty percent of all energy consumed in the country is consumed by home appliances. If appliances that are twice as energy-efficient as those currently available are manufactured, this figure will eventually be reduced to about ten percent.

The argument above requires which of the following assumptions?

(a) Home-appliance usage would not increase along with the energy efficiency of the appliances.
(b) It would not be expensive to manufacture home appliances that are energy-efficient.
(c) Home-appliance manufacturers now have the technology to produce appliances that are twice as energy-efficient as those currently available.
(d) The cost of energy to the consumer would rise with increases in the energy efficiency of home appliances.

01(e) None of these

Direction (22-26): Study the following information carefully and answer the questions which follow—

In a certain code language, some statements are coded as follow:

'give solution for problem' is coded as '*N8 #R3 %M7 @E4'
'pure fruit sell plants' is coded as '@T5 %E4 *L4 #S6'
'pet sensed ghostly farm' is coded as '#M4 *D6 @Y7 %T3'
'spa guards picked flake' is coded as ' %D6 @S6 #E5 *A3'.

22. Which of the following will be the code for 'fruit picked teach game'?

(a) @T5 %D5 #H4 *E4
(b) @T5 %D6 @H5 *E4
(c) @T5 #H4 *E4 %D6
(d) @T5 #H5 *E4 %D6
(e) @T5 #H4 *E4 %D6

23. What will be the code for 'ghostly'?

(a) #Y6 (b) @Y7 (c) %D7
(d) *E4 (e) %D6

24. Which of the following will be the code for 'pure water spa tune'?

(a) *A3 %E4 @R5 *E4
(b) @R5 *E3 %A4 #E4
(c) %A4 #E4 @R4 *E4
(d) %E4 @R4 #E4 *A3
(e) *A3 %E4 @R5 #E4

25. If 'solution farm grain seem' is coded as '*N8 %M4 @N5 #M4'. Then what is code for 'plants means grain seem'?
(a) #S6 *S5 %M4 #N5
(b) %A4 #E4 @R4 *E4
(c) @N5 #S6 *S5 %M4
(d) *S5 %M4 #N5 @S6
(e) None of these

26. What will be the code for 'problem good'?
(a) #Y6 #D4 (b) %M7 @D4 (c) @M6 %D4
(d) %S7 @D4 (e) @D4 %D6

Direction (27-31): Read the given information carefully and answer the given questions.
Twelve friends are sitting in two parallel rows containing six people each in such a way that there is equal distance between adjacent persons. In row 1 A, B, C, D, E and F are seated and all of them are facing north and in row 2 P, Q, R, S, T and U, are seated and are facing south, but not necessarily in the same order.
There are four persons sits to the right of R. R's daughter is immediate neighbour of the one, who faces R. There are one person sits between R's son and R's daughter. Q is married to F. R's son-in-law sits third to the left of the one, who faces the person, who is immediate left of A's brother .R has only two children. Two persons sit between S and T. R's brother sits second to the right of R's sister. S does not sit one of the extreme ends. A is brother-in-law of B. A's father sits second to the right of A's brother. E is married to S. Only one person sits between A's brother and R's mother. R's son-in-law does not sit one of the extreme ends. A's sister-in-law faces S. A's sister-in-law sits third to the left of R's daughter. F and S are the females. P faces E, who sits one of the extreme left end. B sits third to the right of E. Q sits immediate right of the person, who faces R's wife. R's mother sits third to the left of the one, who faces the one, who sits immediate right of R's son-in-law. R's brother-in-law sits fourth to the left of R's wife. C sits diagonally opposite to the one, who is immediate right of U. A is son-in-law of D.

27. Who sits immediate left of the one, who is sister-in-law of A?
(a) B (b) C's brother (c) Q's brother
(d) E's brother-in-law (e) Q

28. Who is grandmother of B?
(a) T
(b) D's mother-in-law
(c) Person sits one of the extreme left end.
(d) E's mother-in-law
(e) All are true

29. Who sits second to the left of the one, who faces the person, who sits second to the left of P?
(a) R's brother (b) Q
(c) None are true (d) A
(e) S's husband

30. Who is the niece of P?
(a) B (b) T's son (c)Q's wife
(d)Q's sister-in-law (e) Q

31. If P related to A's sister-in-law in the same way as Q related to R's daughter. Which of the following is U related to, following the same pattern?
(a) R's brother (b) C's brother (c) F
(d) A (e) None of these

Direction (32-33): Each question consists of some conclusion followed by five statements. Consider the given conclusion to be true even if they seem to be at variance with commonly known facts. Read the conclusions and then decide from which statement, the conclusion can be possible.

32. Conclusion: No toxic is injection.
Some injection are glucose.
Statement:
(a) All toxic are tablet
No tablet is glucose
Some glucose are medicine
All medicine are injection
(b) Some toxic are tablet
All tablet are injection
Some injection are glucose
All glucose are medicine
(b) All tablet are toxic.
No injection is toxic.
Some glucose are injection.
All glucose are medicine.
(c) Some injection are toxic
All injection are tablet
Some toxic are glucose
All glucose are medicine
(d) Some medicine are toxic
Some toxic are injection
Some injection are tablet
All tablet are glucose

33. Conclusion: Some clock are watch.
Some wheel are buses.
Statement:
(a) All watch are clocks.
Some clocks are tyres.
Some tyres are wheels.
Some wheels are buses.
(b) Some watch are wheel
All wheel are tyre
Some tyre are buses
All buses are clock
(c) Some buses are tyre
Some tyre are clock
All clock are watch
Some watch are wheel
(d) All tyre are buses
Some buses are wheel
Some wheel are clock
No clock is watch
(e) Some buses are watch
Some watch are tyre
Some tyre are clock
Some clock are wheel

34. **Statement:** By asking five prominent hospitals in the national capital to deposit nearly Rs. 600 crore to compensate for their failure to treat poor patients, the Delhi government has drawn attention to the social obligation of healthcare providers in the corporate sector as well as the need for timely enforcement of applicable regulations. According to the Delhi government, trusts and registered societies to which public land was allotted to establish hospitals were required to earmark a percentage of their medical facilities and services for indigent patients.

Assumptions:

I. This strengthens the case for private hospitals to dedicate a part of their services to those who cannot afford treatment.

II. Social responsibility of hospitals must be monitored and central government should ensure compliance by the corporate hospitals.

III. There is a great need for the government to monitor and enforce "health services" so that the poor who cannot afford modern health facilities that are extremely costly- are able to be benefited.

(a) All are implicit
(b) Only III is implicit
(c) Only I and III are implicit
(d) Only I and II are implicit
(e) None is implicit

35. The ancient Nubians inhabited an area in which typhus occurs, yet surprisingly few of their skeletons show the usual evidence of this disease. The skeletons do show deposits of tetracycline, an antibiotic produced by a bacterium common in Nubian soil. This bacterium can flourish on the dried grain used for making two staples of Nubian diet, beer and bread. Thus, tetracycline in their food probably explains the low incidence of typhus among ancient Nubi

Which of the following is an assumption can be drawn from the passage?

I. Infectious diseases other than typhus to which the ancient Nubians were exposed are unaffected by tetracycline.

II. Tetracycline is not rendered ineffective as an antibiotic by exposure to the process involved in making bread and beer.

III. Typhus cannot be transmitted by ingesting bread or beer contaminated with the infectious agents of this disease.

IV. Bread and beer were the only items in the diet of the ancients Nubians which could have contained tetracycline.

V. Typhus is generally fatal.

(a) Only II follows
(b) Only III & V follow
(c) Only III follows
(d) Only II, III, IV and V follow
(e) None of these

36. It is not often that professional footballers retire from internationals at the peak of their game. When the 29-year-old Lionel Messi, widely reckoned to be the most skilled footballer today, announced after the 2016 Copa America Final against Chile that he would not wear the Argentinian shirt again, he took everyone by surprise. It is not clear if he has made the retirement call in the heat of the moment. It came after Messi failed, yet again, to win a major title with the Argentinian team; he also missed a crucial penalty in the shootout against Chile after efficient but goal-less play in regulation and extra time. In fact, Messi's overall international record with Argentina has been good, if not spectacular. With him, the team has reached the finals of four important tournaments: the World Cup in 2014 and the Copa America in 2007, 2015 and 2016.

According to the given question, you have to decide which of the statement is/are strong on the basis of the given passage:-

After defeating in Copa America Final, Should Messi continues his international career for two years more?

I. Yes, because it is the only way he can prove himself to the world as a challenging person.

II. No, It is his personal decision to play no more for Argentina and as a player he gave a lot of contribution to his nation. So we should respect his decision.

III. No, because Messi's record as a player of Barcelona is quite better than as a player of Argentina. So he should focus on one side rather than playing for both of them.

(a) Only II & III are strong
(b) Only I & III are strong
(c) Only II is strong
(d) Only III is strong
(e) None is strong

Direction (37-41): Read the given information carefully and answer the given questions.

Ten people G, H, I, J, K, L, W, X, Y and Z live in a building with four floors. Each floor has 3 flats - flat 1, flat 2, and flat 3 in the same order from left to right. Ground floor is numbered floor 1 and top most floor is floor 4. Each flat is built in such a way that Flat 1 of floor 2 is just above Flat 1 of floor 1 and so on.

The two flats in which no one lives are on even numbered floor and in even numbered flat. G does not live on even numbered floor and even numbered flat. W lives in the flat just above H. The flat between K and X is vacant and K lives in one of the flat above X. L lives in an odd numbered flat which is in the left of X. Z and Y lives on the same floor and no one else is living with them on that floor. G lives on a floor and flat just above W's floor and flat. I live on one of the floor on which one flat is vacant. Z and I both lives in the flat which is numbered 1.

37. Who is living just above X?
(a) K (b) G (c) J
(d) Z (e) No one

38. Which of the following statement is true about G?
(a) G lives on an even numbered flat
(b) K is the immediate neighbour of G
(c) G lives on a floor on which one flat is vacant
(d) None is true
(e) G and W lives on the same floor

39. Which of the following lives on the ground floor?
(a) G (b) I (c) L
(d) W (e) Both (a) & (c)

40. Which of the following does not belong to a certain group?
(a) J (b) K (c) W
(d) H (e) Y

41. Who is living in flat 1 on floor 4?
(a) Z (b) Y (c) No one
(d) G (e) W

Directions (42-44): Each question consists of four statements followed by five conclusions. Consider the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions does not logically follow from the given statements using all statements together and mark that conclusion as your answer.

42. Statements: All chairs are table
Some table are Books
All Books are Pen.
No Pen is a Copy.
Conclusions: (a) Some table are not copy.
(b) All table being Pen is a possibility.
(c) At least some Copy are Pen.
(d) All Books are not copy.
(e) Some pen are books

43. Statements: Some pencils are kites.
Some kites are desks.
All desks are cup.
All cup are tea.
Conclusions:
(a) All tea are cup is a possibility.
(b) Some cup are definitely pencils
(c) Some tea are desks.
(d)Some cup are kites.
(e) Some pencil can be desks

44. Statements: Some boards are clips.
All clips are papers.
Some papers are Lanes.
All lanes are roads.
Conclusions:
(a) Some roads can be boards
(b) Some lanes are papers
(c) Some boards are clip
(d) All roads are clips
(e) Some roads are paper

Direction (45-49): Read the given information carefully and answer the given questions.
J, K, L, M, S, T, U and V are eight employees of an organization and they will attend a meeting in the four months (March, June, October & November). The meeting held in each month on 13th and 22nd date. Only two meetings held in a month. No person can attend the meeting after L. M attends the meeting in the month which has less than 31 days. S and U attends meeting after M on date 22nd of different months, while J & k attends before M and K attends after J in the same month. V does not attend the meeting in the month in which either S attends or L attends.

45. How many people attends meeting between S and L?
(a) 1 (b) 2 (c) 3
(d) 4 (e) None of these

46. Four of the following follow a same pattern find the one which does not follow?
(a) J – March (b) S - 13 (c) U – October
(d) U – 22 (e) T – November

47. Who attends meeting in November?
(a) T,L (b) M,T (c) S,T
(d) S,U (e) None of these

48. Who attends meeting immediately after M?
(a) U (b) S (c) V
(d) T (e) L

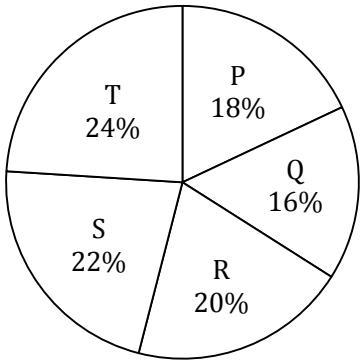
49. S attends meeting in the month of?
(a) June (b) October (c) November
(d) March (e) None of these

50. Targeted Delivery of Government subsidies and benefits to ensure that they reach the poor and the deserving. What would be the cause of above government budget?
(a) Some portion is still untouched from new subsidies and other scheme.
(b) Some urban sector can get subsidy scheme profit.
(c) DBT ensures related information about the poor people for subsidies.
(d) The transparency and clearance will be increased.
(e) None of these

QUANTITATIVE APTITUDE

Directions (51-55): There are five shops P, Q, R, S and T and they sell two different items - item A and item B. Following pie-chart shows the total no. of items sold by different shops in a particular months.

Total Number of Items sold = 500



51. What is the central angle corresponding to the total number of items sold by shop S ?
(a) 87.8° (b) 71.2° (c) 79.2°
(d) 77.8° (e) None of these

52. Total number of items sold by shop P is equal to 36% of the total items purchased by shop P, then what is total number of unsold items of shop P ?
(a) 320 (b) 160 (c) 140
(d) 360 (e) None of these

53. If the total number of items sold by shop S are 10% more and by that of T are 20% more in the next month, than what is the total number of items sold by shop S and T together in the next month ?
(a) 265 (b) 355 (c) 255
(d) 365 (e) None of these

54. If the total no. of item B sold by shop Q and that of R are equal and the ratio between the item A sold by shop Q to the item A sold by shop R is 2 : 3, then find the total number of item A sold by shop Q and R together ?
(a) 80 (b) 90 (c) 70
(d) 100 (e) None of these

55. If the total number of item B sold by all of the shops together are 58% of the total items sold by all of the shops, then find the difference between the item A sold by all of the shops together to the item B sold by all of the shops together ?
(a) 60 (b) 70 (c) 85
(d) 95 (e) None of these

56. The average age of Sheela, Ram and Mona is 38 years . 2 year ago, average age of Sheela and Ram is 39. 2 year hence, average age of Hema and Mona is 45. Find the present age of Hema ?
(a) 52 years (b) 54 years (c) 50 years
(d) 48 years (e) None of these

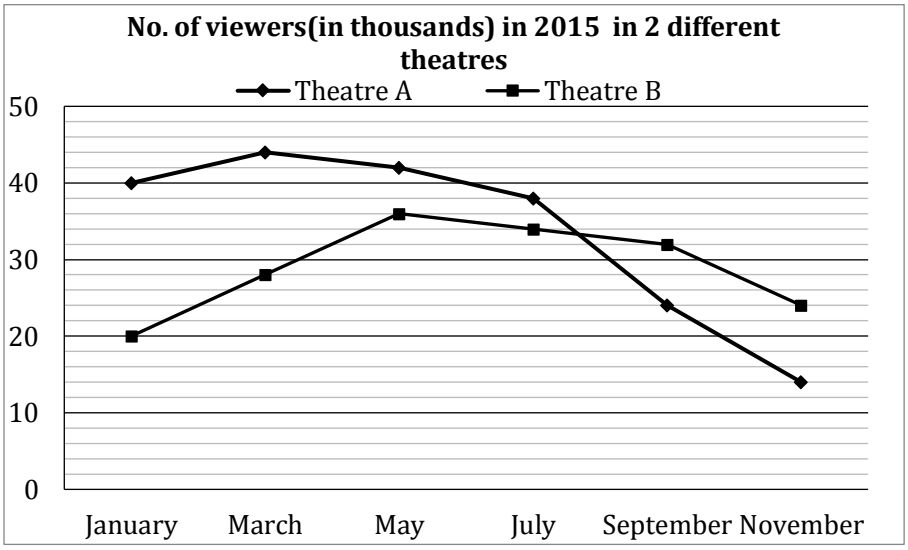
57. Total distance between A and B is d kms. If the distance travelled along the stream is three time of the total distance and the distance travelled against the stream is two times of the total distance. If the time taken to cover the distance along the stream is 10% less then the time taken to cover the distance against the stream. If a person cover a distance of 21 km in 1 hr 24 min along the stream, then find the rate of current ?
(a) 2 km/hr (b) 3 km/hr (c) 1 km/hr
(d) 4 km/hr (e) None of these

58. In a bag there are 3 magenta balls, 5 green balls and 7 blue balls . 2 balls are drawn one by one without replacement. If the first ball comes out to be of magenta colour, then 8 more magenta coloured balls are added to bag. Find the probability that both the balls drawn are of magenta colour.
(a) $\frac{1}{35}$ (b) $\frac{2}{11}$ (c) $\frac{1}{11}$
(d) $\frac{2}{23}$ (e) None of these

59. A started a business , Band C joined him in the 1st year ,they invested in the ratio of 5:4:7 respectively and the period for which they invested was in the ratio of 4:3:2 respectively. In the 2nd year. A doubled the investment, B and C continued with the same investment and they invested for the same no of month as they did in 1st year. The total profit in 2 years was 14000. What is B's share of profit.?
(a) Rs 2500 (b) Rs 3000 (c) Rs 350
(d) Rs 4000 (e) none of these

60. A man invested Rs X in simple interest at a rate of interest of 15 % for 5 yrs . then he also invested X+300 at compound interest at 10% rate for 2 years on another scheme. The total interest obtained from both schemes is Rs4383. Find the total amount (in Rs) invested by the man.
(a) 9000 (b) 8700 (c) 8500
(d) 9300 (e) none of these

Directions (61-65): Study the following line graph carefully and answer the following questions.



61. What is the difference between total number of viewers of theatre A in may, September and November together and the no. of viewers of theatre B in the same months ?
(a) 12000 (b) 16000 (c) 8000
(d) 14000 (e) None of these

62. If number of viewersof theatre A in January 2016 increases by 20% and of theatre B by10% as compared to the corresponding no. of viewers of these theatres in January in 2015. Then find the difference between no. of viewers of theatre A and theatre B in January 2016.
(a) 20000 (b) 22000 (c) 25000
(d) 26000 (e) None of these

63. The number of viewers of theatre B in October is equal to average of the viewers of same theatre in September and November, also the viewers of theatre A in October is $\frac{5}{7}$ of the viewers of theatre B in the same month. Find the number of viewers of theatre A in October.
(a) 24000 (b) 22000 (c) 25000
(d) 20000 (e) None of these

64. The total number of viewers in march 2016 increased by 40% as compared to that in March 2015. If the viewers of theatre A in March 2016 are 25% more than that in 2015. Then find the difference between number of viewers of theatre B in March 2016 and in March 2015.
(a) 15800 (b) 19800 (c) 17800
(d) 18800 (e) None of these

65. What is the ratio of viewers of theatre A in May and November to that of theatre B in January and September?
(a) 14 : 11 (b) 13 : 14 (c) 11 : 14
(d)14 : 13 (e) None of these

Directions (66-70): find the wrong term in the following series-

66. 33 39 56 85 127 185 254
(a) 39 (b) 254 (c) 185
(d) 85 (e) 56

67. 7 9 21 67 275 1371 8233
(a) 275 (b) 21 (c) 67
(d) 1371 (e) 8233

68. 7 4 5 9 21 52.5 160.5
(a) 4 (b) 5 (c) 9
(d) 52.5 (e) 21

69. 13 27 45 117 333 981 2925
(a) 13 (b) 27 (c) 45
(d) 117 (e) 333

70. 3 6 15 45 157 630 283
(a) 45 (b) 15 (c) 157
(d) 283 (e) 630

71. Two jar A and B. Both contain 20 % milk. The quantity of jar A is 4 times than that of quantity of jar B. both jar mixtures are mixed and form new mixture C and 15 litres of water is added .The final ratio of water to milk is now 19:4. Find the initial quantity (in litres) of milk in jar B.
(a) 5 (b) 4 (c) 10
(d) 8 (e) none of these

72. The ratio of work done by 30 women to the work done by 25 men, in the same time is 5:6. If 9 women and 10 men can finish a work in $3\frac{1}{13}$ days. Then how many women can finish the work in 4.5 days?
(a) 18 (b) 16 (c) 20
(d) 25 (e) none of these

73. Out of a total 85 children playing badminton or table tennis or both, total number of girls in the group is 70% of the total number of boys in the group. The number of boys playing only badminton is 50% of the total number of boys and the total number of boys playing badminton is 60% of the total number of boys. The number of children playing only table tennis is 40% of the total number of children and a total of 12 children play badminton and table tennis both. What is the number of girls playing only badminton ?
(a) 16 (b) 14
(c) 17 (d) Date inadequate
(e) None of these

74. A laptop costs 15 times as compared to cost of a mouse. On each laptop there is a profit of 25%. While the total profit on selling a mouse and a laptop is 30%. If there is a profit of Rs 2100 on selling the mouse then find the cost price of a laptop?
(a) Rs. 30000 (b) Rs. 2000 (c) Rs. 32000
(d) Rs. 35000 (e) none of these

75. The marked price of a shirt and a trouser are in the ratio 1 : 2. The shopkeeper gives 40% discount on the shirt. If the total discount on the shirt and trousers is 30%, the discount offered on the trousers is
(a) 15% (b) 20% (c) 25%
(d) 30% (e) None of these

Directions (76-80): In the following table, then investments and profit of three persons is given for different years in a joint business.

	Investments (in Rs.)			Profit (in Rs.)		
Year	A	B	C	A	B	C
2012	17000	21000	23000	85000	—	115000
2013	—	5000	—	—	12500	92500
2014	—	7000	8000	—	—	14000
2015	—	—	9000	50000	44000	24000
2016	11000	20000	—	—	—	—

Note:
1. Apart from year 2015, they invested the amounts for same period.
2. Some values are missing. You have to calculate these value per given data.

76. If the total profit in 2014 is 49000, then find the ratio of the investment of B in 2013 to the investment of A in 2014.
(a) 5 : 13 (b) 10 : 27 (c) 15 : 11
(d) 20 : 33 (e) None of these

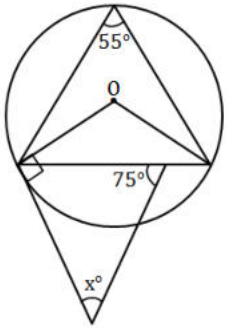
77. In year 2015, A and B invested their amount for 6 months and 4 months respectively. If the difference of investment of A and B in 2015 is Rs. 8000 then find the number of months that C invested his amount ?
(a) 4 months (b) 6 months
(c) 8 months (d) Can't be determined
(e) None of these

78. Total profit earned by B in year 2012 is how much more (in Rs.) then the profit earned by him in the year 2016 ?
(a) 3 : 11 (b) 13 : 29
(c) 33 : 59 (d) Can't be determined
(e) None of these

79. Profit earned by A in 2013 is approximate what % more then the investment made by C in 2013 ?
(a) 131% (b) 115% (c) 120%
(d) 150% (e) 142%

80. Total profit earned by all in 2016 is 445500 Rs. and the ratio of investment made by A and B together and investment made by B and C together is 31 : 52. Then find the difference between the profit made by A and C in 2016 ?
(a) 153000 (b) 148500 (c) 166000
(d) 170000 (e) None of these

81.



Quantity I: x° Quantity II: 55°
(a) Quantity I > Quantity II
(b) Quantity I < Quantity II
(c) Quantity I ≥ Quantity II
(d) Quantity I = Quantity II
(e) No relation

82. $(x^a)^c = x^c$
$\frac{x^{2b}}{x^a} = (x^{5a}) \times (x^d) \times (x^b)$
Quantity I = b
Quantity II = d
(a) Quantity I > Quantity II
(b) Quantity I < Quantity II
(c) Quantity I ≥ Quantity II
(d) Quantity I = Quantity II
(e) No relation

83. a > 0 < b
For all the integer value of a and b
$x = \frac{(a^2+ab)-(ab^2-b)}{2a^2+b^2-ab}$
Quantity I: x
Quantity II: 1.5
(a) Quantity I > Quantity II
(b) Quantity I < Quantity II
(c) Quantity I ≥ Quantity II
(d) Quantity I = Quantity II
(e) No relation

84. A box contains 4 Red balls, 6 white balls, 2 orange balls and 8 black balls.
Quantity I: Two balls are drawn at random probability that both balls are either red or white.
Quantity II: Three balls are drawn. The probability that all are different.
(a) Quantity I > Quantity II
(b) Quantity I < Quantity II
(c) Quantity I ≥ Quantity II
(d) Quantity I = Quantity II
(e) No relation

85. The cost price of 2 items A and B is same. The shopkeeper decided to mark the price 40% more than the CP of each item. A discount of 25% was given an item A and discount of 20% was given on item B. total profit earn on both item was Rs. 34
Quantity I: CP of the items
Quantity I: CP of any item which was sold at 12.5% profit and profit earned on it was Rs. 25
(a) Quantity I > Quantity II
(b) Quantity I < Quantity II
(c) Quantity I ≥ Quantity II
(d) Quantity I = Quantity II
(e) No relation

Directions (86-90): What should come in place of question mark (?) in the following given questions? (Note: You need not to calculate the exact value.)

86. $35.99\sqrt{?} + 32.0032\sqrt{?} = \frac{68}{10.998} \times (?)$
(a) 81 (b) 72 (c) 169
(d) 121 (e) 144

87. $(3.2)^2 + (9.8)^2 + (8.13)^2 + (4.24)^2 = ?$
(a) 190 (b) 230 (c) 150
(d) 210 (e) 160

88. $\sqrt{360.98} \times 18.99 + 1082.98 \div 57.07 = ?$
(a) 405 (b) 380 (c) 356
(d) 370 (e) 360

89. $94.95 \times 13.03 + \sqrt{35.98} \times 14.99 = 53 \times \sqrt{?}$
(a) 25 (b) 144 (c) 225
(d) 625 (e) 900

90. $(333\% \text{ of } 856) \div 49.95 = ?$
(a) 43 (b) 41 (c) 47
(d) 39 (e) 57

Directions (91-95): Each of the following questions consist of 3 statements (I),(II) and (III). You have to determine that which of the following statement/statements are necessary to answer the questions:

91. A trader sells a homogeneous mixture of A and B at the rate of Rs 32 per kg. What is the profit earned by the trader?
(I) He bought B at the rate of Rs 29 per kg
(II) He bought A at Rs 8 higher than the rate of B per kg 1
(III) He bought A at the rate of Rs 34 per kg
(a) Only I and II
(b) Only I and III
(c) I, II and III together are not sufficient
(d) Either (a) or (b)
(e) Any two of these

92. 12 men and 8 women can complete a piece of work in 10 days. How many days will it take for 15 men and 4 women to complete the same work?
(I) 15 men can complete the work in 12 days
(II) 15 women can complete the work in 16 days
(III) The amount of work done by a woman in three-fourth of the work done by a man in one day.
(a) Only I and II or III
(b) Only II or III
(c) Only III
(d) Any two of the three
(e) Only II

93. What will be the sum of the ages of father and the son after five years?
I. Father's present age is twice son's present age
II. After ten years the ratio of father's age to the son's age will become 12 : 7
III. Five years ago the difference between the father's age and son's age was equal to the son's present age
(a) Only I or II
(b) Only II or III
(c) Only I or III
(d) Only III
(e) Any two of the three

94. What is the amount saved by Sahil per month from his salary?
(I) Sahil spends 25% of his salary on food, 35% on medicine and education.
(II) Sahil spends Rs 4000 per month on food and 35% on medicine and education and saves the remaining amount.
(III) Sahil spends Rs 2500 per month on medicine and education and saves the remaining amount.
(a) Only II
(b) Only III
(c) Both II and III
(d) Only I and II or III
(e) None

95. An article is sold at 15% discount. Find the percentage gain.
(I) If the article had been sold for Rs 150 less, there would have been no profit no loss
(II) Had the article been sold for Rs 50 more, the gain would have been 15%
(III) Cost price of the article is Rs 1000

(a) Only I or III
(b) Any one of them
(c) III and either I or II
(d) Any two of them
(e) None

Directions (96-100): Study the following information carefully to answer these question.
An institute having 450 employees has sent all its employees for training in one or more areas out of HRM, computer skills and financial skills. The employees are classified into two categories—officers and clerks, who are in the ratio of 4 : 5. 10% of the officers take training only in computer skills, 16% of the clerks take training only in HRM which is equal to the number of officers taking training only in financial skills and is equal to the 50% of the number of officers taking training only in HRM and financial skills both. 6% of the total employees take training in all of which two-thirds are officers. 10% of the total employees take training only in HRM and computer skills, which is five times the number of clerks taking training only in computer skills and financial skills. 10% of clerks take training only in HRM and computer skills. The number of officers taking training only in HRM is 25% of the number of clerks taking training only in HRM. 20% of the total number of employees take training only in computer skills. Number of clerks taking training in HRM and financial skills both is 20% of the total number of clerks.

96. Total how many officers take training in HRM?
(a) 110 (b) 128 (c) 118
(d) 98 (e) None of these

97. Total how many clerks take training in computer skills but not in HRM?
(a) 113 (b) 104 (c) 88
(d) 79 (e) None of these

98. Total how many employees take training in financial skills but not in HRM?
(a) 106 (b) 135 (c) 127
(d) 134 (e) None of these

99. Total how many clerks take training in financial skills?
(a) 115 (b) 106 (c) 47
(d) 97 (e) None of these

100. What per cent of the total number of officers take training in computer skills but not in financial skills?
(a) 25% (b) 40% (c) 20%
(d) 15% (e) None of these

Note: Data interpretation (paragraph based) questions were very tough and very lengthy so very few students ttempted these questions. The paragraph was based on company which have production (in Rs.) from different years

ENGLISH LANGUAGE

Directions (101–105): Read the following passage carefully and answer the questions given below it.
The finance ministry on Monday said the Union budget would be growth-oriented, implicitly signaling that it will address the investment crisis in the Indian economy.
"Given the fiscal constraints and other parameters under which the government has to function, the effort of the government is to present a budget which is growth-oriented, that maintains the momentum of growth and tries to develop on it," economic affairs secretary Shaktikanta Das said in an interview with DD News uploaded on YouTube on Monday.
According to Das, the budget will also detail new measures to support ongoing programmes such as Start-up India, Standup India, Make In India, Digital India and the Skill mission – all of which have a strong focus on creating jobs.
Finance minister Arun Jaitley will be presenting his third budget on 29 February at a time when private investment has dried up and the exchequer has had to incur higher expenditure due to implementation of the One Rank One Pension scheme for the armed forces and the recommendations of the Seventh Pay Commission.
That may cramp the government's ability to accelerate public investment to revive economic growth while sticking within the confines of its fiscal deficit targets. Some parts of the government believe that the emphasis should be on growth and not fiscal consolidation. Other parts, and the Reserve Bank of India, believe the finance minister should adhere to his fiscal commitments made in the last budget.
Without revealing whether the government will digress from the path of fiscal consolidation, Das said the government's priority is to take a balanced view on "the expenditure requirement to keep our growth momentum and to what extent we can borrow'. Care Ratings chief economist Madan Sabnavis said the government has to increase its allocation for public investment on infrastructure to stimulate growth. "I expect government to spend Rs.10,000-20,000 crore additional amount on infrastructure. Given nominal GDP (gross domestic product) is not expected to expand significantly, the leeway for the government to spend more may not be there while keeping fiscal deficit within 3.7-3.9% of GDP. So I don't expect a big-bang push for infrastructure spending given the fiscal constraint," he said.
The finance ministry revealed more contours of its budget when minister of state for finance Jayant Sinha, also in an interview to DD News, said the four pillars of the budget

will be poverty eradication, farmers' prosperity, job creation and a better quality of life for all Indian citizens. 'This budget will be a forward looking budget that will ensure that India will continue to be a haven of stability and growth in a very turbulent and choppy global economic environment," he added.

The government has been contemplating tax incentives to companies in the manufacturing sector, including tax deductions on emoluments paid to new employees, to encourage firms to step up hiring and create jobs under its Make in India initiative. The government published suggestions that it has received internally from various government departments and other stakeholders on the mygov.in website, seeking further ideas and comments from the public.

Suggestions being considered by the government include financial incentives, tax incentives under the Income Tax Act, 1961, and subsidies for equipping employees with job skills, and upgrading and improving employment exchanges. Another suggestion is to expand the scope of the tax deduction currently available to companies that add at least 10% to their workforce in a year by lowering the threshold. This incentive is available only in cases of employees who earn less than Rs.6 lakh a year.

(The topic of the Passage asked in the exam was based on Infrastructure Investment)

101. What is the main objective of the government to create the Union Budget?
(a) It should meet the requirements of the society.
(b) It should be under some fiscal constraints.
(c) It should be growth oriented.
(d) It should meet the requirements of a developed country.
(e) It should change the momentum of growth.

102. Where is it expected to invest by government to stimulate growth?
(a) On infrastructure
(b) On governments pl
(c) On fiscal management
(d) On manufacturing sector
(e) On social development.

103. What does this mean that India will continue to be a "haven of stability "?
(a) That new budget will make India stable forever.
(b) The four pillars of budget will lead to make stability.
(c) India will continue towards stability even in disturbed economic environment.
(d) The budget will remain unchanged even in turbulent and choppy economic environment.
(e) None of the above

104. Why is the government providing tax incentive to companies in manufacturing sector?
(a) For better infrastructure.
(b) For tax deductions on emoluments paid to new employees,
(c) To create new job opportunities and to initiate project 'Make in India'
(d) to create new job opportunities and to initiate project Standup India.
(e) to encourage firms to step up hiring new skilled employees

105. Which one of the following is NOT the suggestion considered by the government?
(a) To expand the scope of tax deduction to companies that add at least 10% to their workforce in a year.
(b) To upgrade and improve employment exchange.
(c) To provide incentive to employees who earn less than Rs.6 lakh a year.
(d) Subsides to train employees with job skills.
(e) Tax penalty for high income people.

Directions (106-110): Read the following passage carefully and answer the questions given below it.

The alarm bells should start ringing any time now. An important component of the economy has been sinking and needs to be rescued urgently. This critical piece is 'savings' and, within this overall head, household savings is the one critical subcomponent that needs close watching and nurturing.

While it is true that one of the primary reasons behind the current economic slowdown is the tardy rate of capital expansion - or, investment in infrastructure as well as plant and machinery - all attempts to stimulate investment activity are likely to come to naught if savings do not grow. Without any growth in the savings rate, it is futile to think of any spurt in investment and, consequently, in the overall economic growth. If we source all the investment funding from overseas, it might be plausible to contemplate investment growth without any corresponding rise in savings rate. But that is unlikely to happen.

Within the overall savings universe, the subcomponent 'household savings' is most critical. It provides the bulk of savings in the economy, with private corporate savings and government saving contributing the balance. The worrying factor is the near-stagnation in household savings over the last eight years or so. What's even more disconcerting is the fact that household savings remained almost flat during the go-go years of 2004-08.

This seems to be counter-factual. There are many studies that show that there is a direct relationship between overall economic growth and household savings. So, at a time when India's GDP was growing by over 9% every year, the household savings rate stayed almost constant at close to 23% of GDP. There was, of course, an increase in absolute terms, but it remained somewhat fixed as a proportion of GDP.

What is responsible for this contradictory movement? The sub-group on household savings, formed by the working group on savings for the 12th Plan set up by the Planning Commission and chaired by RBI deputy governor SubirGokarn, has this to say, "...a recent study had attributed the decline in the household saving ratio in the UK during 1995-2007 to a host of factors such as declining real interest rates, looser credit conditions, increase in asset prices and greater macroeconomic stability...

While recognising that one of the key differences in the evolving household saving scenario between the UK and India is the impact of demographics (dependency ratio), anecdotal evidence on increasing consumerism and the entrenchment of (urban) lifestyles in India, apart from the easier availability of credit and improvement in overall macroeconomic conditions, is perhaps indicative of some 'drag' on household saving over the last few years as well as going forward."

India has another facet: a penchant for physical assets (such as bullion or land). After the monsoon failure of 2009, and the attendant rise in price levels that has now become somewhat deeply entrenched, Indians have been stocking up on gold. Consequently, savings in financial instruments dropped while those in physical assets shot up. This is also disquieting for policy planners because savings in physical assets stay locked in and are unavailable to the economy for investment activity. There is a counter view that higher economic growth does not necessarily lead to higher savings. According to a paper published by Ramesh Jangili (Reserve Bank of India Occasional Papers, Summer 2011), while economic growth doesn't inevitably lead to higher savings, the reciprocal causality does hold true. "It is empirically evident that the direction of causality is from saving and investment to economic growth collectively as well as individually and there is no causality from economic growth to saving and (or) investment."

Whichever camp you belong to, it is beyond doubt that savings growth is a necessary precondition for promoting economic growth. The Planning Commission estimates that an investment of $1 trillion, or over 50 lakh crore, will be required for the infrastructure sector alone. And, a large part of this critical investment will have to be made from domestic savings.

(The topic of the Passage asked in the exam was based on Informal Economy to formal Economy)

106. What is the main concern of the author behind saying that 'the alarm bells should start ringing anytime now'?
(a) The current economic growth is slowing down due to regular failure of monsoon.
(b) Due to power shortage industrial growth could not touch the target.
(c) Household savings are sinking and they require to be revamped.
(d) Due to a sharp decline in real interest rates people have lost their enthusiasm to invest in govt schemes.
(e) All the above

107. What is/are the primary reasons behind the current economic slowdown?
(A) Slow rate of capital expansion
(B) Tardy investment in infrastructure as well as plant and machinery
(C) A rapid increase in the cases of corruption, and decreased FDI
(a) Only (A) (b) Both (A) and (B)
(c) Either (A) or (C) (d) Both (B) and (C)
(e) All (A), (B) and (C)

108. How is household savings related to overall economic growth? Give your answer in the context of the passage?
(A) Overall economic growth is directly related to household savings.
(B) Overall economic growth is inversely proportional to household savings.
(C) There is no specific relationship between overall economic growth and household savings.
(a) Only (C) (b) Only (B)
(c) Only (A) (d) Either (A) or (B)
(e) Either (A) or (C)

109. What was/were the reason(s) of drop in savings in financial instruments after 2009?
(a) Rise in price level of gold
(b) Decrease in real interest rates on savings in financial instruments
(c) Investment in physical assets, particularly land
(d) Only (a) and (c)
(e) Only (b) and (c)

110. Which of the following is/are the reasons of a drag on household savings in India over the last few years?
(a) Increasing consumerism
(b) Entrenchment of urban lifestyle
(c) Easier availability of credit
(d) Improvement in overall macroeconomic conditions
(e) All the above

Directions (111-115): In each of the following questions five options are given, of which one word is most nearly the same or opposite in meaning to the given word in the question. Find the correct option having either same or opposite meaning.

111. Prodigy
(a) Pauper (b) Despondent (c) Demure
(d) Wanton (e) Epitome

112. Nondescript
(a) Conducive (b) Discern
(c) Tantamount (d) Defined
(e) Emancipate

113. SAVANT
(a) Glutton (b) Postulant (c) Shrink
(d) Pluck (e) Itinerant

114. CORPULENT
(a) Lean (b) Gaunt (c) Emaciated
(d) Obese (e) Nobble

115. EMBEZZLE
(a) Misappropriate (b) Balance
(c) Remunerate (d) Clear
(e) Perfection

Directions (116-120): Which of the pair of phrases (a), (b), (c) and (d) given below should replace the phrase given in bold in the following sentence to make the sentence grammatically meaningful and correct? If the sentence is correct as it is and no correction is required, mark (e) as the answer.

116. According to author Dishant gautam, a novel is **difficult** to write when compared to a play is like **going for** an election where one has to appeal to a thousand people at a time whereas in a book one appeals to one only person.
(a) simpler, running in
(b) faster, voting through
(c) easier, running for
(d) fool proof, voting on
(e) No correction required

117. We have in America a **collection** speech that is neither American, Oxford English, nor colloquial English, but **a mixture** of all three.
(a) motley, an enhancement
(b) hybrid, a combination
(c) nasal, a blend
(d) mangled, a medley.
(e) No correction required

118. Alice Walker's The Temple of My Familiar, far from being a tight, **focused** Narrative, is instead **a cheaper** novel that roams freely and imaginatively over a halfmillion
(a) traditional , a chronological
(b) provocative , an insensitive
(c) forceful , a concise
(d) focused , an expansive
(e) circuitous , a discursive

119. Jayashree was habitually so docile and **erratic** that her friends could not understand her sudden **hostile** her employers.
(a) accommodating…outburst against
(b) erratic…envy of
(c) truculent…virulence toward
(d) hasty…annoyance toward
(e) apologetic…hostile

120. The village headman was unlettered, but he was no fool, he could see through the **mystery** of the businessman's proposition and promptly **moved** him down.
(a) deception, forced
(b) naivete, turned
(c) potential, forced
(d) sophistry, turned
(e) No correction required

Directions (121-125): Each of the following questions has a paragraph from which one sentence has been deleted. From the given options, choose the one that completes the paragraph in the most appropriate way.

121. Indira Gandhi's 100th birth anniversary is coming up on 19 November. Her long and eventful stint as India's prime minister—barring a three-year gap between 1977 and 1980, she served continuously from 1966-84—has ensured that a lot of current debates continue to be informed by her policy choices. But any attempt at a dispassionate analysis of Gandhi's legacy is immensely difficult given the polarizing figure that she was. The highs of the 1971 military victory over Pakistan have to be reconciled with the lows of the Emergency.

_____

(a) The Allahabad high court verdict which nullified her election to Parliament was the straw that broke the camel's back.
(b) Even Lal Bahadur Shastri—Gandhi's immediate predecessor—had realized the need for liberalization to overcome the chronic shortages that the Indian economy was constantly dealing with.
(c) Her various other moves like bank nationalization and Operation Blue Star continue to evoke strong views.
(d) The move was met with a strong domestic backlash.
(e) Her centralized political administration increased the frequency and magnitude of, and therefore the fiscal costs of handling, regional turbulences.

122. What's been the policy response so far? One of jaw-dropping inefficiency and political bickering. _____. On the one hand, paddy farmers in neighbouring Punjab, Haryana and Uttar Pradesh, having harvested the rice, start burning the leftover stubble in order to prepare the farms for winter sowing. At the same time, as

climate scientist Krishna Achuta Rao writes in a recent article, "Like Los Angeles and Mexico City, Delhiites are cursed by geography to be prone to a meteorological phenomenon called inversion where warm air rests above the colder air closer to the ground, preventing it from mixing upwards, thereby trapping all that we put into it—almost like a lid."

(a) In Delhi, air pollution is seasonal: with the onset of the winter, two things happen.
(b) This is an annual affair, but the policy response has been marked by a complete lack of preparedness.
(c) Delhiites are a beleaguered lot and a degree of resignation characterizes the popular response to this health crisis.
(d) Yet, pollution masks are now far more ubiquitous than they were a year ago.
(e) That Delhi's air is among the foulest is well known—it's close to being declared a hardship assignment for foreign diplomats.

123. Despite this evidence, and given the scale of the challenge of delivering quality education for all, governments have progressively looked to the private sector for support. However, mechanisms to track the quality of education in private schools have historically tended to be weak or absent, even in developed countries. _____. The report concluded that "overseeing private schools may be no easier than providing quality schooling" and that "governments may deem it more straightforward to provide quality education than to regulate a disparate collection that may not have the same objectives".

(a) Data for relatively richer countries also shows that systems with low levels of competition have higher social inclusion and that upward social mobility is higher in government systems.
(b) Private schools appear better since they enroll children from relatively advantaged backgrounds who are able to pay, not because they deliver better quality.
(c) The long-term solution lies in strengthening the public education system in its complexity and ensuring that all of India's children receive quality education.
(d) Building this regulatory capacity requires significant financial and human resource investments.
(e) The road to reform is fraught with challenges but the cost of inaction will be much higher.

124. Redeeming a gift voucher at a neighbourhood store is a familiar transaction; a digital coupon is a slight tweak. Even new smartphone users—regardless of age or literacy—won't leave money on the table at their grocer. Besides, digital payments have already become so simple in India that small retailers who don't accept cards can also very easily redeem QR-code-based vouchers. Alphabet Inc.'s Google has pioneered an audio-QR-based payment mechanism for India that rides on instant person-to-person or person-to-merchant payments. _____

(a) The payday Amazon and its homegrown rival, Flipkart, are waiting for will come after new users' buying habits change.
(b) It's reasonable to expect that Indians' familiarity with digital payments will grow more quickly than their penchant for online shopping.
(c) As Ambani rolls out his strategy, expect the current two-way battle between Amazon and Flipkart to turn into a three-horse race.
(d) So long as the discounts come from brands, the cost of such an e-commerce push is also going to be more manageable than for pure-play digital marketplaces.
(e) India has 432 million internet users, but only 60 million online shoppers.

125. South India has always been highly dependent on the monsoon, which is uncertain and risky. Over the past few decades, the south-west monsoon has become unpredictable and has reduced in intensity. What does this mean for the Cauvery? _____. In good years, when the river receives enough rainfall, there is no discord between the two States. In bad years, like the one we are facing now, it turns into a gargantuan political crisis. Unfortunately, the number of bad years is only going to worsen.

(a) We need to pay attention to land use at the regional level.
(b) Despite warnings from environmentalist groups and farmer coalitions, and interventions by the court, this practice continues unchecked.
(c) Rapid urbanisation has converted fertile agriculture, forests and wetlands into concreted areas that are unable to retain rainwater or channel them into tributary streams that feed the Cauvery.
(d) Siltation in dams and connecting river channels has reached alarming proportions.
(e) The amount of water the river receives during the summer rains is becoming increasingly unreliable.

Direction (126-130); Select the phrase/connector (**STARTERS**) from the given three options which can be used to form a single sentence from the two sentences given below, implying the same meaning as expressed in the statement sentences.

126. (1) Pakistan has continued to facilitate their military operations against US troops.
(2) It has repeatedly promised to act against the Taliban, or to push them into peace negotiations.
(i) Though Pakistan has…
(ii) Continuing to facilitate…
(iii) Despite repeatedly promising…
(a) Only (i) is correct
(b) Only (ii) is correct
(c) Only (iii) is correct
(d) Both (i) and (iii) are correct
(e) All are correct

127. (1) Expansion of BharatNet, a project to connect all the 2.5 lakh gram panchayats is a move in the direction of access to reliable, stable and high-speed broadband service all over the country.
(2) Raising allocation from Rs 6,000 crore in 2016-17 to Rs 10,000 crore for the current fiscal is hardly adequate for this sector.
(i) While expansion of…
(ii) Although raising allocation…
(iii) In a move to expand…
(a) Only (i) is correct
(b) Only (ii) is correct
(c) Both (i) and (iii) are correct
(d) Both (ii) and (iii) are correct
(e) All are correct

128. (1) Malaysia has maintained good terms with all claimants, notably China.
(2) Malaysia was the first to claim some of the Spratly Islands way back in 1979 in its Exclusive Economic Zone.
(i) While maintaining good…
(ii) As Malaysia was the first…
(iii) In order to maintain…
(a) Only (i) is correct
(b) Only (ii) is correct
(c) Only (iii) is correct
(d) Both (i) and (ii) are correct
(e) All are correct

129. (1) The government has been making efforts to encourage the acquisition of weapons systems and defence equipment through the "make in India" route.
(2) However about 70 per cent of the requirements are still imported.
(i) In an effort to encourage…
(ii) Though the government…
(iii) The acquisition of weapons systems and defence equipment……..
(a) Only (ii) is correct
(b) Only (iii) is correct
(c) Both (i) and (iii) are correct
(d) Both (ii) and (iii) are correct
(e) All are correct

130. (1) The Defence Budget is a statement of account.
(2) It is a tool for demonstrating the country's resolve and for enhancing deterrence through signalling.
(i) Since the Defence Budget…
(ii) Apart from being a statement…
(iii) Besides being a statement…
(a) Only (i) is correct
(b) Only (iii) is correct
(c) Both (i) and (ii) are correct
(d) Both (ii) and (iii) are correct
(e) All are correct

Directions (131-135): Five statements are given below, labelled a, b, c, d and e. Among these, four statements are in logical order and form a coherent paragraph. From the given options, choose the option that does not fit into the theme of the paragraph.

131. (a) Consequently, research investment by private companies remained at a meagre 3-4% of revenue against the international norm of 10-12%.
(b) Forty-five Indian seed companies got a licence to use the technology and participated in the explosion in the Indian cotton market.
(c) Sadly, the policies of the Central and state governments fell short of the required visionary approach.
(d) The genetically modified (GM) seeds technology has disrupted the existing industry structure in India.
(e) These changes led to a temporary monopoly for the technology provider but the policy framework had the opportunity to help society reap long-term economic benefit by enabling the industry to absorb and exploit the new technology.

132. (a) Her long and eventful stint as India's prime minister—barring a three-year gap between 1977 and 1980, she served continuously from 1966-84—has ensured that a lot of current debates continue to be informed by her policy choices.
(b) The reforms in the 1980s also did little to increase the government's ability to raise revenue.
(c) The highs of the 1971 military victory over Pakistan have to be reconciled with the lows of the Emergency.
(d) Indira Gandhi's 100th birth anniversary is coming up on 19 November.
(e) But any attempt at a dispassionate analysis of Gandhi's legacy is immensely difficult given the polarizing figure that she was.

133. (a) Its P2P structure has served as a template for any number of digital businesses since.
(b) Sean Parker was just 19 years old when he co-founded Napster in 1999.
(c) Parker's bracingly irreverent 2015 essay on "hacker philanthropy" in The Wall Street Journal displayed that same audaciousness.
(d) The new Co-Impact initiative launched last Wednesday is meant to target precisely that kind of change.
(e) The peer-to-peer (P2P) file-sharing network changed the shape of the global music industry, for better and for worse.

134. (a) The focus should be to strengthen economy-wide competencies, build robust infrastructure, and ensure functional and speedy administration across states.
(b) Any sign of exploitation of cheap labour would turn consumers against products in rich countries.
(c) The WTO may also frown upon some tax concessions and subsidies.
(d) Special economic zones failed to take off on any large scale as they did not suit the political economy.
(e) Resources were misdirected and revenues lost, considering that large companies set up shop in SEZs mainly to milch tax breaks.

135. (a) Regular, moderate exercise, including authentic yoga, holds the key.
(b) Urban planning must provide for open spaces and facilities for such mass exercise to take place.
(c) Changes in lifestyle and diet can prevent Non communicable diseases.
(d) This is more than a personal choice.
(e) So, dealing with Non communicable diseases needs novel thinking and innovative responses.

Direction (136-140): Please select the most appropriate option, out of the five options given for each of the following sentences, which, in your view, should be grammatically and structurally correct. Please note that the meaning & context of the sentence must not change.

136. (a) Although I already knew the answer and he invited me to visit him often, since I just have seen her in the square, I was never determined to yield this point.
(b) Although I have already known the answer and he invited me to visit him often but since I just have seen her in the square, I was not determined to yield this point.
(c) Although I knew the answer already, and he has often invited me to visit him, since I just have seen her in the square, I am never determined to yield this point.
(d) Although I already know the answer and he often invited me to visit him , since I have just seen her in the square, I am determined never to yield this point.
(e) None is true.

137. (a) If I have enough money I would have backpack around Europe. But unfortunately I was broken.
(b) If I have had enough money, I would have done backpack around Europe. But, unfortunately I am broke.
(c) If I had enough money I would backpack around Europe. But, unfortunately I am broke.
(d) If I have enough money I would backpack around all over the Europe. But unfortunately I am broke.
(e) None is true.

138. (a) The judges finally distributed the awards among the most active children talking at length among themselves.
(b) The judges finally distributed the awards talking at length among themselves.
(c) The judges, talking at length among themselves finally distributed the awards among the most active children.
(d) The judges distributed finally talking at length among themselves the awards among the most active children.
(e) None is true.

139. (a) I have been ill for fortnight and the Management and the school sports committee as well prefer to elect me the Captain of school team. Initially I thought that it is only in a fun but I was wrong.
(b) I had been ill for the fortnight and the Management and the school sports committee preferred to elect me the Captain of school team. Initially I thought that it was only in a fun but I was wrong.
(c) I have been ill for a fortnight and the Management as well as the school sports committee prefers to elect me Captain of school team. Initially I thought that it was only in fun but I was wrong.
(d) I was ill for fortnight thus the Management as well as the school sports committee preferred to elect me the Captain of school team. Initially I thought that it was only in a fun but I was wrong.
(e) All are true

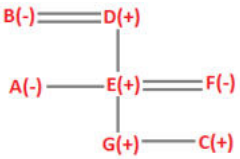
140. (a) If you try to understand the concept in the class you will not only remember it but also will not be able to put to use while solving even the difficult exercises.
(b) If you tried to understand the concept of the whole class, you will not only remember it, but also can put to use while solving even the difficult exercises.
(c) If you tried to understand the concept in the class, you would not only remember it but also can put it to use while solving even the difficult exercises.
(d) If you tried to understand the concept in the class, you would not only remember it but also could put it to use while solving even the difficult exercises.
(e) None is true.

Solutions

REASONING ABILITY

Direction (1-5):

Person	Professions	Fruits	Hobbies	Beverages
A	Patient	Apple	Shopping	Thumps up
B	Teacher	Banana	Hunting	Thumps up
C	Dentist	Raspberry	Fishing	Thumps up
D	Accountant	Orange	Watching TV	Thumps up
E	Engineer	Grapes	Sleeping	Limca
F	Doctor	Papaya	Sewing	Limca
G	Lawyer	Litchi	Entertaining	Limca



1. (d); 2. (c); 3. (e);

4. (d); 5. (a);

6. **(d);** Litter city has introduced a levy of Rs. 100 on private cars entering the city. This levy is in addition to the toll already being levied. In the passage, the administration argues that this new levy will force people from using their cars and to take public transport. The administration thinks that the decisive issue for car owners is saving money. If car owners are already paying more as toll charges than they would pay in bus fares, money is not the reason for their using the car. That means car owners are unlikely to change their way of commuting to save money. so option (d) is the right answer. Taxi drivers' demand for rate hike is irrelevant to the argument, so (a) is ruled out. Option (b) is inapt because a comparison with the neighbouring city doesn't point to a flaw in the argument. Present bus riders are irrelevant to the City's plan.

7. **(c);** The BJP won all seven seats during the 2014 Lok Sabha election, but it won only three seats out of seventy in the 2015 assembly polls. The passage suggests that voters do not show the same inclination for a particular political party in Lok Sabha and assembly polls. Clearly, they elect representatives based on something else. Option (a) is irrelevant to the passage as the passage doesn't make any reference to electoral promises. Option (b) is a general comment as it is about reversing the national trend in an election, but the focus of the passage is on voters' choice of party. Option (c) is a logical conclusion that can be drawn from the passage – voters elect different representatives for different purposes, here for Lok Sabha and assembly. (d) is a vague comment; in fact, nothing in the passage points to prevailing conditions.

8. **(d);** The conclusion is that genetically modified mosquitoes, Incapable of spreading the malaria parasite, if released into natural insect population, can become a remarkable tool in fighting malaria. The conclusion presupposes that the mosquitoes released into natural mosquito population will breed with normal mosquitoes and pass the anti-malarial genes on to their young ones. So option (d) is the correct answer. Option (a) is stated in different words in the passage, so it cannot be an assumption. Option (b) is quite farfetched because the passage makes no reference to drug and insecticide resistance or recent successes. (c) has no relevance to the conclusion.

9. **(b);** The argument in the given text is that the US president cannot sustain his legacy because of the slow progress of his initiative, i.e 'securing nuclear materials', which, in other words, means that if he can speed up his initiative, he can have a lasting glory. So, the underlying assumption here is that whether one has a lasting glory or not depends on how fast their initiatives progress. The assumption comes out only in option (b). Hence, it is the right answer

10. **(c);** The argument of the passage is that while the sales of car have come down, the profits have increased. This paradox can be resolved if it can be proved that it has actually sold a variety of vehicles that can bring high profits even though they are sold in a fewer number. This point comes out only in option (c). the other options either contradict the facts mentioned in the text or repeat the information given in the text. Therefore, they are ruled out.

Solutions (11-15):

Friends	Car driving position	Colour of shirt	Distance	Rank
P	4	Red	27	5th
Q	3	Black	35	1st
R	2	Green	29	4th
S	5	Brown	33	2nd
T	1	Blue	31	3rd

11. (a); 12. (a); 13. (a);

14. (c); 15. (a);

Directions (16-20):

Candidate	I	II	III	IV	V	ii	iii
Nidhi Agarwal	✓	✓	✓	✗	✓	–	–
Prakash Verma	✓	✗	✓	✓	✓	✓	–
Tanya Goyal	✓	✓	✗	✓	✓	–	✓
Aniket Kumar	✓	✓	✓	✓	✓	–	–
Varsha Singh	✓	✓	✓	✓	✓	–	–

16. (b); Nidhi Agarwal fulfills all conditions except condition (iv), because she secured only 40% in the selection examination, but required percent is 45% to select in examination to fulfill the condition (iv). So Nidhi Agarwal is not to be selected.

17. (d); As it is given in the condition (ii), candidate has to secure at least 40% marks in the interview, but Prakash Verma secured only 38% marks in the interview, but if he has secured 62% marks in the selection examination. So, that type of case is referred to VP-Marketing.

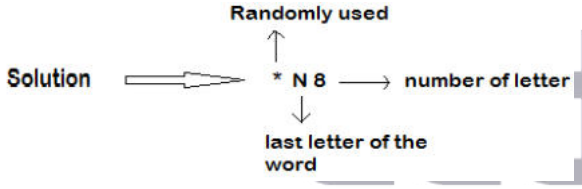
18. (c); According to the question, candidate has post qualification work experience of at least five years in marketing division, but Tanya Goyal has experience of four years, but she has post qualification work experience of four year as Deputy Marketing Manager, So that case is referred to GM-Marketing.

19. (a); Aniket Kumar follows all required conditions, so he is to be selected.

20. (a); Varsha Singh follows all required conditions, so she is to be selected

21. (a); This argument is based on the assumption that if the appliances become more efficient, then more homes would not be tempted to increase their utility/consumption in the household.

Direction (22-26): In this code language
Symbols – ramdomly selected
Numerical values- Number of letters.
Letter- The last letter of the word.



22. (d); @T5 #H5 *E4 %D6

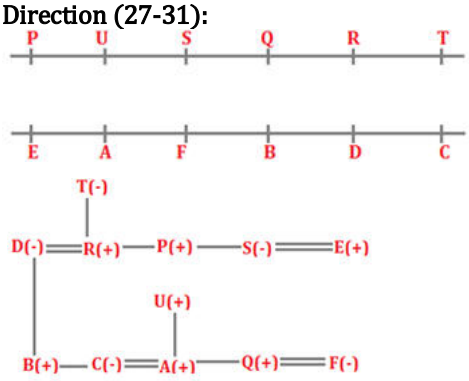
23. (b); @Y7

24. (e); *A3 %E4 @R5 #E4

25. (c); @N5 #S6 *S5 %M4

26. (b); %M7 @D4

Direction (27-31):

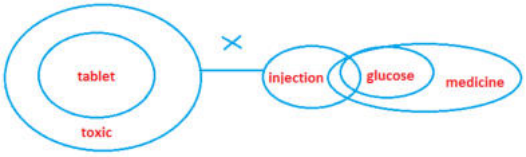


27. (c); **28. (e);** **29. (e);**

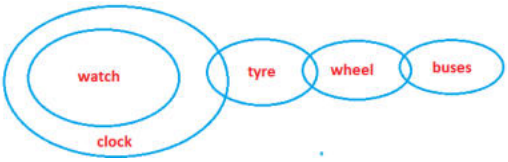
30. (d); **31. (b);**

Direction (32-33):

32. (c);



33. (a);



34. (c); Such strict actions of Delhi government made private hospitals to serve their services to poor people. So I is implicit. But nothing is mentioned about central government in the statement II also it is a course of action, So, II is not implicit.
According to statement Delhi Govt. wanted to provide medical facilities for indigent patients. So we can assume that there is need for the govt. to monitor and enforce health services to the needy person.

35. (a); Statement II is a valid assumption as tetracycline is produced by a bacterium which is found in Nubian soil and the bacterium can develop on the grain which is used in making bread & beer.so tetracycline is formed through the process of making of bread & beer. Statement I is not valid because nothing is said in the passage about the disease other than typhus. Statement III is also not valid because Typhus is a disease and the statement talks about the contamination of a disease by another disease which is wrong in the context of this passage. Statement IV & V is invalid as No information is given in the passage that bread & beer were their only items in the diet and also about Typhus is fatal.

36. (c); Only II is strong argument because it clearly explains the freedom which is given to a person to take decisions about his life. So it gives a valid reason. Argument I is a weak statement because of the 'only' word used in the statement. Messi can prove himself by all other ways also. Argument III is also a weak Statement because there is a comparison between the position of Messi as a player of Argentina and the position of Messi as a player of Barcelona club.

Direction (37-41):

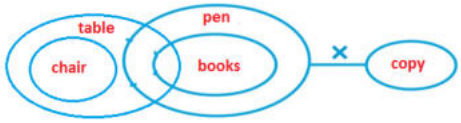
Flat ⟶ Floor ↓	Flat 1	Flat 2	Flat 3
Floor 4	Z	☒	Y
Floor 3	J	K	G
Floor 2	I	☒	W
Floor 1	L	X	H

37. (e); **38.** (b); **39.** (c);

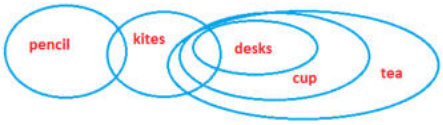
40. (b); **41.** (a);

Directions (42-44):

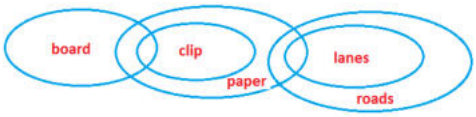
42. (c);



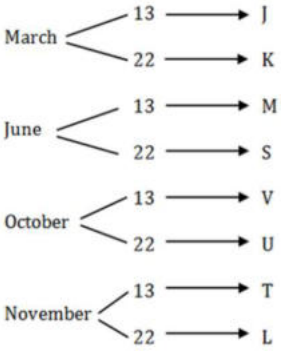
43. (b);



44. (d);



Direction (45-49):



45. (c); **46.** (b); **47.** (a);

48. (b); **49.** (a);

50. (a); Govt. promulgate about subsidies and benefits to give benefit to untouched portion of our Population.

QUANTITATIVE APTITUDE

51. (c); Required central angle $= \frac{22}{100} \times 360 = 79.2°$

52. (b); Total number of items purchased by P
$= \frac{90}{36} \times 100 = 250$
Required no. of items unsold $= (250 - 90)$
$= 160$

53. (a); Required no. of item sold $= 121 + 144 = 265$

54. (d); $\frac{80-x}{100-x} = \frac{2}{3} \Rightarrow x = 40$
Required no. of items
$= (80\text{-}40) + (100\text{-}40) = 100 = 100$

55. (e); Item B $= \frac{58}{100} \times 500 = 290$
Item A $= (500 - 290) = 210$
Required difference $= (290 - 210) = 80$

56. (b); Let present age of Ram, Mona and Sheela is R, M and S respectively
$S + R + M = 114$m
$S + R = 82$
$M + H = 86$
$\therefore M = 32$
$\therefore$ Required Age $= (86 - 32) = 54$ years.

57. (b); Distance covered along the stream $= 3d$
Distance covered against the stream $= 2d$
Let speed of boat in still water $= x$ km/hr
Let speed of current $= y$ km/hr
$\therefore \frac{21}{x+y} = \frac{7}{5}$
$x + y = 15$ ... (i)
And $\frac{3d}{(x+y)} = \frac{90}{100} \times \frac{2d}{x-y}$
$x - y = 9$ ... (ii)
$\therefore x = 12 \Rightarrow y = 3$
$\therefore$ Rate of current $= 3$ km/hr

58. (c); Required probability $= \frac{3}{15} \times \frac{10}{22} = \frac{1}{11}$

59. (b); Let there investment in Ist year $= 5x, 4x, 7x$
Time $= 1$ year, $\frac{3}{4}$ year, $\frac{1}{2}$ year
Investment in second year $= 10x, 4x, 7x$
Time $= 1$ year, $\frac{3}{4}$ year, $\frac{1}{2}$ year
Ratio of profit $= 15 : 6 : 7$
Share of B $= \frac{6}{28} \times 14000 = 3000$ Rs.

60. (d); $\frac{X \times 75 \times 5}{100} + (X + 300)\left[\left(1 + \frac{10}{100}\right)^2 - 1\right] = 4383$
$0.75X + 0.21X + 63 = 4383$
$x = 4500 \Rightarrow (X + 300) = 4800$
Total investment $= 9300$ Rs.

61. (a); Required difference
$= (42 + 24 + 14) - (36 + 32 + 24)$
$= 12$ thousand or 12000

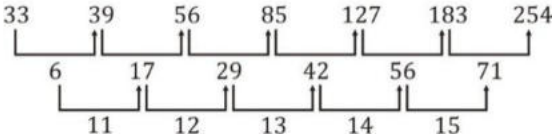
62. (d); Required difference $= 48000 - 22000$
$= 26000$

63. (d); No. of viewers of theatre A in October
$= \frac{5}{7} \times \left(\frac{32+24}{2}\right) = 20$ thousand

64. (c); Total viewers in march 2016 $= 100800$
Viewers of theatre A in March 2016 $= 55000$
Viewers of theatre B in march 2016
$= 100800 - 55000 = 45800$
Required difference $= 45800 - 28000 = 17800$

65. (d); Required ratio $= \frac{(42+14)}{(20+32)} = 14 : 13$

66. (c);



∴ 183 not, 185

67. (a); $(\times 1+2), (\times 2+3), (\times 3+4), (\times 4+5), \ldots..$
$\therefore 67 \times 4 + 5 = 273,$ not 275

68. (e); $(\times 0.5+0.5), (\times 1+1), (\times 1.5+1.5), (\times 2+2), \ldots..$
$\therefore 9 \times 2 + 2 = 20$ not 21

69. (b); $(\times 3-18), (\times 3-18), (\times 3-18), \ldots\ldots\ldots..$
$\therefore 13 \times 3 - 18 = 21$ not 27

70. (c); $\times 2. \times 2.5, \times 3, \times 3.5 \ldots..$
$\therefore 45 \times 3.5 = 157.5$ not 157

71. (b); $\frac{4X+15}{X} = \frac{19}{4} \Rightarrow x = 20$
Total milk = 20
Milk in jar B = $\frac{1}{5} \times 20 = 4L$

72. (b); Ratio of efficiency = $5 \times \frac{5}{6} : 6 = 25 : 36$
Let a man can finish the work in $25x$ days
A woman can finish the work in $36x$ days
$\frac{9}{36x} + \frac{10}{25x} = \frac{13}{40}$
Time taken by 1 women = 72 days
No. of women required to complete the work in 4.5 days = $\frac{72}{4.5} = 16$

73. (b);

	Boys (50)	Girls (35)
Only Badminton	25	14
Only Badminton TT	5	7
Only. TT	20	14

74. (a); Let cp of mouse =x
Cp of laptop=15x
Total SP=$16x \times 1.3 = 20.8x$
SP of laptop=$15x \times 1.25 = 18.75x$
SP of mouse=2.05x,
profit=1.05x=2100, x=2000, 15x=30000

75. (c); Let MP of shirt = 100
MP of trouser = 200
Discounted price of shirt = 60
Let discounted price of trouser = x
$60 + x = \frac{70}{100} \times (100 + 200)$
$x = 150$
Discount = $\frac{(200-150)}{200} \times 100 = 25\%$

76. (a); 8000 → 14000
$7000 \rightarrow \frac{14}{8} \times 7000 = 12250$
Then profit made by A in 2014
$= 49000 - (14000 + 12250) = 22750$ Rs.
$\therefore 14000 \rightarrow 8000$
$22750 \rightarrow \frac{8}{14} \times 22750 = 13000$
∴ Required Ratio = 5000 : 13000 = 5 : 13

77. (c); Let investment of A in 2015 be 'x'
Investment of B in 2015 be 'y'
$\frac{6x}{4y} = \frac{25}{22}$
x: y = 25: 33
Also given Difference of investment of A and B is Rs. 8000
So, investment of A = 25000
Investment of B = 33000
Let C invested for 't' months
$\frac{33000 \times 4}{9000 \times t} = \frac{44000}{24000}$
t = 8 months

78. (d); 23000 → 15000
$21000 \rightarrow \frac{115000}{23000} \times 21000$
Profit of B in 2012 = 105000
Since profit of all in 2016 is not given, we can't determine the required ratio.

79. (d); Required % = $\frac{92500-37000}{37000} \times 100 = 150\%$

80. (b); Let investment by C in 2016 = x
$\frac{11000+20000}{20000+x} = \frac{31}{52} \Rightarrow x = 32000$
∴ Ratio of their investment = 11 : 20 : 32
Required profit = $\frac{24}{63} \times 445500 = 148500$ Rs.

81. (b); $\angle O = 2 \times 55° = 110$
x° = 180 - (75° + (90°- 35°))
x° = 50°
so, x < 55°

82. (a); $(x^a)c = x^c$
$ac = c \Rightarrow a = 1$
$\frac{x^{2b}}{x^a} = x^{5a} \times x^d \times x^b$
Or, 2b - a = 5 + d + b
b = 6a + d
b = 6 + d
so b > d

83. (b); Let us take the value of a = 1 & b = 1 putting this in the equation we get
x = 1
So, x < 1.5

84. (b); Probability that both balls are either Red or White = $\frac{{}^4C_2 + {}^6C_2}{{}^{20}C_2} = \frac{6+15}{190} = \frac{21}{190}$
Probability that both bolls are of different colours (RWO, RWB, WOB and ROB)
$= \frac{(4\times6\times2)+(4\times6\times8)+(6\times2\times8)+(4\times2\times8)}{{}^{20}C_3} = \frac{20}{57}$
Quantity I < Quantity II

85. (d);

	A CP	B CP
MP →	1.4 CP	1.4 CP
SP →	1.4 CP × 0.75	1.4CP × 0.80

Profit = (1.4 × 0.75 CP + 1.4 × 0.80 CP) - 2CP
34 = 0.17CP ⇒ CP = 200
II. CP = x
SP = 1.125x
1.125x - x = 25
0.125x = 25
x = 200
So, quantity I = Quantity II

86. (d); $36\sqrt{x} + 32\sqrt{x} = \frac{68}{11} \times x$
$68\sqrt{x} = \frac{68}{11} \times x$
$\sqrt{x} = 11$
$x = 121$

87. (a); $9 + 100 + 64 + 16 \approx 190$

88. (b); $\approx 19 \times 19 + 19$
$\approx 19 \times 20 \approx 380$

89. (d); $1235 + 6 \times 15 = 53 \times \sqrt{x}$
$\sqrt{x} = 25 \Rightarrow x = 625$

90. (e); $\frac{2850}{50} = 57$

91. (c); The quantity of each gradient A & B in the mixture is not known, so, the cost price of the mixture cannot be found out from the available statements. Hence profit percentage cannot be known.

92. (d); In the question asked, there are two unknowns (work rate of men and work rate of women). Three statements will form three distinct equations. In the question itself, one equation is formed. So, any one of the given statements is sufficient. Therefore, any two of three statements can be dispensed with.

93. (e); Any two of three statements are sufficient to answer the question, because two distinct equations are needed to find the two unknowns in the question. Hence any one of the statements can be dispensed with.

94. (d); In I the amount spent on food and on medicine, education has been indicated in percentage, but nothing has been mentioned for savings amount. In II, the amount spent on food has been given in Rupees and in III, the amount spent on medicine & education has been given in Rupees. So, combining the percentage value of I and rupees value of II or the percentage value of I and its rupees value of III, the amount saved can be found out.

95. (c); From statement III CP is known. So, by using any of the remaining statements we can get the answer.

Solution (96-100)
Total employees (450)
Officers – 200
Clerks – 250

HRM (50)	Off – 10 Clerk – 40
Computer – Skills (90)	Off – 20 Clerk – 70
Financial skills (87)	Off – 40 Clerk – 47
HRM + CS (45)	Off – 20 Clerk – 25
HRM + FS (130)	Off – 80 Clerk – 50
C5 + F5 (21)	Off – 12 Clerk – 9
All (27)	Off – 18 Clerk – 9

96. (b); Required Officers taking training in HRM = 10 + 80 + 18 + 20 = 128

97. (d); Clerks training in CS but not in HRM = 70 + 9 = 79

98. (e); Employees taking training in FS but not in HRM = 87 + 21 = 108

99. (a); Required Clerks = 47+ 50 + 9 + 9 = 115

100. (c); Required % = $\frac{20+20}{200} \times 100 = 20\%$

ENGLISH LANGUAGE

101. (c); With an interview given by economic affairs secretary Shaktikanta Das it is clearly mentioned that government has to work under some fiscal constraints and it is making efforts to present a growth oriented budget. Fiscal constraints is a characteristic and not an objective and hence option 2 is wrong.

102. (a); In the 5th passage it is said by economist Madan Sabnav is the government has to increase its allocation for public investment on infrastructure to stimulate growth.

103. (c); The new budget is based on four pillars: poverty eradication, farmers' prosperity, job creation and a better quality of life for all Indian citizens. The new budget will ensure that India will continue towards stability even in disturbed and choppy situations.

104. (c); In the 2nd last passage it is mentioned that the government has been providing tax incentives to companies in the manufacturing sector, including tax deductions on emoluments paid to new employees, to encourage firms to step up hiring and create jobs under its Make in India initiative.

105. (e); The government has considered various suggestions which includes 1, 2, 3 and 4. The 5 option is not mentioned anywhere in the passage.

106. (c); The answer is clearly given in the first paragraph of the passage where author says "The alarm bells should start ringing any time now. An important component of the economy has been sinking and needs to be rescued urgently. This critical piece is 'savings' and, within this overall head, household savings is the one critical subcomponent that needs close watching and nurturing." Thus, option (c) is the right answer.

107. (b); The primary reasons behind the current economic slowdown is the tardy rate of capital expansion - or, investment in infrastructure as well as plant and machinery. Thus, statement (A) and (B) both are true.

108. (c); It is clearly mentioned in the fourth paragraph of the passage that "Overall economic growth and household savings both are directly related." Thus, statement (A) is true and other statements are incorrect.

109. (d); A penchant for the physical assets (such as a bullion or land) and the rise in the price levels of the gold are the main reasons of drop in savings in financial instruments after 2009. Thus, option (d) is correct.

110. (e); The author says "...a recent study had attr4 ibuted the decline in the household saving ratio in the UK during 1995-2007 to a host of factors such as declining real interest rates, looser credit conditions, increase in asset prices and greater macroeconomic stability..." Thus, option (e) is correct.

111. (e); **Prodigy**- a young person with exceptional qualities or abilities.
Epitome- a person or thing that is a perfect example of a particular quality or type. So, the right answer to this question is epitome, which is an synonym of prodigy. No other word can be a synonym or antonym of prodigy.

112. (d); **Nondescript**- lacking distinctive or interesting features or characteristics.
Defined- what is meant by a word, text, concept, or action. So, the right answer to this question is defined , which is an antonym of Nondescript. No other word can be a synonym or antonym of Nondescript.

113. (b); **Savant** is a French word commonly used in English. It is a common noun that means 'a highly learned person,' 'a high scholar,' 'a polyglot,' etc.
Postulant is a common noun. It means 'beginner,' 'greenhorn,' 'an immature, inexperienced person.' Thus a postulant cannot fit into a team of experienced professionals. So, the right answer to this question is postulant, which is an antonym of savant. No other word can be a synonym or antonym of savant.

114. (d); **Corpulent** is a formal word that describes a fat person.
Obese means having excessive body weight caused by the accumulation of fat; extremely fat. So, the right answer to this question is obese, which is an antonym of corpulent. No other word can be a synonym or antonym of Corpulent.

115. (d); When a person **embezzles**, it usually means that he is stealing money from his employer.
Misappropriate- dishonestly or unfairly take (something, especially money, belonging to another) for one's own use. So, the right answer to this question is misappropriate, which is an synonym of embezzles. No other word can be a synonym or antonym of Embezzles.

116. (c); Writing a novel could be 'easier' or 'simpler'. 'Faster' describes a person or a thing in motion.
'Running' for an election is a phrase which mean to be a candidate. The others are irrelevant

117. (b); Speech that is hybrid (made up of several elements) by definitions combines these elements. The technical term hybrid best suits this context because it is neutral term devoid of negative connotations (which motley and mangled possess).

118. (d);

119. (a); 'accommodating…outburst against' is the correct use.
Accomodating- fitting in with someone's wishes or demands in a helpful way.
Outburst against- a sudden release of strong emotion.

120. (d); Sophistry is deception through words and turn down is to reject.
Naivete - inexperienced
Deception - deceit through action

121. (c); The given paragraph is about the tenure of Indira Gandhi as India's Prime Minister. Read the paragraph carefully, among the given options, there is only sentence (c) which finds some connection with the paragraph and at the same time it concludes the paragraph in the best manner, adding meaning to it. Other options are not feasible enough to make the paragraph complete and conclusive. Hence (c) is the correct choice.

122. (a); The given paragraph is about how air pollution is increasing India's burden of disease in accordance with the most vulnerable state of the Indian capital. Read the paragraph carefully, it can be easily viewed that among the given options, only the sentence (a) forms the correct substitution to the provided blank space. Other options do not go with the theme of the paragraph. They alter the meaning of the paragraph. Hence (a) is the correct choice.

123. (d); The given paragraph is about the education system in India and the efforts by the government to upgrade the public education system. Among the given options, only sentence (d) fits perfectly into the blank space as it follows the sentence prior to the space as well as the one following it. It brings the continuity into the meaning of the paragraph. Other options are not relevant enough to bring about a similar meaning to the paragraph. Hence (d) is the correct choice.

124. (b); The given paragraph is about the digitization of payment methods in India and its subsequent chances of getting a place in the market in coming days. Read the paragraph carefully, it can be easily drawn that the only sentence that follows the pattern of the theme of the paragraph is (b). It adds meaning to the paragraph and at the same time it concludes the paragraph in the most evident way. Other options, though related to the same subject, are not relevant enough to be the part of this particular paragraph. Hence (b) is the correct choice.

125. (e); The paragraph is about the monsoon condition of South India and its impact on Indian rivers like Cauvery. There is an indication in the sentence prior to the blank space that asks a question regarding the river Cauvery. It clearly states that among the given options, only sentence (e) fits perfectly into the space provided as it follows the other sentences in a proper order to bring out an appropriate meaning to the paragraph. Other options are irrelevant to this particular paragraph. Hence (e) is the correct choice.

126. (d); (i) Though Pakistan has repeatedly promised to act against the Taliban, or to push them into peace negotiations, it has continued to facilitate their military operations against US troops.
(iii) Despite repeatedly promising to act against the Taliban, or to push them into peace negotiations, Pakistan has continued to facilitate their military operations against US troops.

127. (a); (i) While expansion of BharatNet, a project to connect all the 2.5 lakh gram panchayats is a move in the direction of access to reliable, stable and high-speed broadband service all over the country, raising allocation from Rs 6,000 crore in 2016-17 to Rs 10,000 crore for the current fiscal is hardly adequate.

128. (a); While maintaining good terms with all claimants, notably China, Malaysia was the first to claim some of the Spratly Islands way back in 1979 in its Exclusive Economic Zone.

129. (a); (ii) Though the government has been making efforts to encourage the acquisition of weapons systems and defence equipment through the "make in India" route, about 70 per cent of the requirements are still imported.

130. (d); (ii) Apart from being a statement of account, the Defence Budget is also a tool for demonstrating the country's resolve and for enhancing deterrence through signalling.
(iii) Besides being a statement of account, the defence budget is a tool for demonstrating the country's resolve and for enhancing deterrence through signalling.

131. (a); Sentences **dbec** form a coherent paragraph as they are talking about the merits and demerits of new technology (Genetically modified seeds technology). Sentence (a) is giving the statistics of investment by private companies making it unrelated to other sentences. Hence option (a) is the correct choice.

132. (b); Reading the sentences we can conclude that it revolves around the theme of Analysis of Indira Gandhi's legacy as India's Prime Minister making sentences **daec** as coherent paragraph while sentence (b) which is about 1980 reform is not connecting well with the other sentences. Hence option (b) is the correct choice.

133. (d); Sentences **beac** are interlinked to each other discussing about the peer-to-peer (P2P) file-sharing network, co-founded by Sean Parker, serving many purposes while sentence (d) talks about the launch of Co- Impact initiative, making no connection with other sentences. Hence sentence (d) is the correct choice.

134. (a); Going through the sentences, we find that sentences **debc** form a coherent paragraph talking about the reasons behind the failed Special economic zones on any large scale while sentence (a) is talking about the focus in development across states which fails to connect with other sentences. Hence option (a) is the correct choice.

135. (e); We can easily point out that sentences **cadb** form a coherent paragraph talking about the prevention of Non communicable diseases while sentence (e) is about requirement to deal with the Non communicable diseases, making it unrelated to other sentences. Hence option (e) is the correct choice.

136. (d); Adverb modifies a verb/an adjective or an adverb. Place it before the verb i.e. 'already know', 'often invited', 'have just seen', 'determined never to yield this point – i.e. I will never compromise/surrender on this point, it is not 'never determined' –it will mean – adverb never is giving emphasis on the determination of the subject 'I' besides this is the particular point which is never to be yielded.

137. (c); unreal past conditional with little or negligible probability. Punctuation usage –comma- to be placed before and after the adverb 'unfortunately' as the same has been used in the middle of the sentence. Had it been used in the beginning of the sentence, comma would have been required only after the said adverb.

138. (c); The judges, talking at length among themselves, finally distributed the awards among the most active children. (Participial phrase – modifies judges)

139. (c); "I have been ill for a fortnight and the Management as well as the school sports committee prefers to elect me Captain of school team. Initially I thought that it was only in fun but I was wrong."

140. (d); Conditional Real past with low probability although something better can happen with the turn of events like paying more attention in the class. So, use simple past in 'if' clause followed by comma and base form of the verb with would/should/could/might.

REASONING ABILITY

Direction (1-5): Study the following information carefully and answer the questions given below:

Eight persons A, B, C, D, E F, G and H are going to watch movie in different months i.e. January, April. May, June, July, August, October and December but not necessarily in the same order.
F was going to watch movie in the month which has 30 days. There are three persons watching movie between F and C. H watches the movie just before A, who is watching the movie before B. B watches the movie just before C. H is watching the movie in the month which has maximum number of days but not in January. D is watching the movie in the month which has 30 days. G is watching the movie after D.

1. If E is related to F and H is related to C then, in the same way D is related to which of the following ?
(a) H (b) F (c) C
(d) B (e) A

2. Which of the following statement is true as per the given information?
(a) D is going to watch movie after F
(b) Two persons are watching movie between G and B
(c) B is watching the movie in January
(d) A is watching the movie in August
(e) None is true

3. The number of persons watching the movie between D and F is same as between B and __?
(a) E (b) F (c) H
(d) A (e) None of these

4. Four of the following five are alike in a certain way and hence they form a group. Which one of the following does not belong to that group?
(a) H (b) D (c) C
(d) B (e) G

5. How many persons are watching the movie between B and D?
(a) Five (b) Three (c) Four
(d) Two (e) None

Direction (6-10): Study the following information carefully and answer the questions given below:

A certain number of persons are sitting in a row facing in north direction. Four persons are sitting between P and Q. F sits second to the right of Q. One person sits between F and S. S sits at eighth position from one of the extreme ends. D sits third to the right of S. H sits fifth to the left of Q. Eight persons are sitting to the left of Q.

6. What is the maximum possible number of persons are sitting in a row?
(a) Twenty (b) Twenty-two (c) Twenty-six
(d) None of these (e) Twenty-five

7. How many persons are sitting between P and S?
(a) Three (b) Five (c) None
(d) Two (e) More than five

8. What is the position of D with respect to F?
(a) Fifth to the left
(b) Sixth to the right
(c) Second to the left
(d) Fifth to the right
(e) None of these

9. How many persons are sitting to the left of H?
(a) One (b) Three (c) Two
(d) Four (e) None of these

10. If A is sitting exactly in between the P and D, then what is the position of A with respect to S?
(a) Third to the left
(b) None of these
(c) Third to the right
(d) Second to the left
(e) Second to the right

11. In the word 'CHLORINE', how many pairs of the letters have the same number of letters between them in the word as in alphabet?
(a) Four (b) Two (c) One
(d) Three (e) More than four

Direction (12-15): In each of the questions below are given some statements followed by some conclusions. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.
(a) If only conclusion I follows.
(b) If only conclusion II follows.
(c) If either conclusion I or II follows.
(d) If neither conclusion I nor II follows.
(e) If both conclusions I and II follow.

12. Statements: Only a few home is picnic. No picnic is mystery. All mystery is real.
Conclusions: I. Some mystery are not picnic .
II. All home being picnic is a possibility.

13. Statements: Only a few strong is tough. Only a few tough is dark
Conclusions: I. Some strong is not dark .
II. No tough is strong.

14. Statements: No network is dull. Only a few dull is fast. All fast is memory.
Conclusions: I. Some memory are definitely not network.
II. Some dull are not network.

15. Statements: All tennis is football. All football is basketball. No basketball is cricket.
Conclusions: I. No football is cricket.
II. All tennis is basketball.

Direction (16-20): Study the following information carefully and answer the questions given below:

Twelve persons are sitting in the two parallel rows containing six persons in each row in such a way that there is an equal distance between adjacent persons. In the first row, A, B, C, D, E and F are seated and all of them are facing north. In the second row, P, Q, R, S, T and U are seated and all of them are facing south. Therefore, in the given seating arrangement, each member seated in a row faces another member of the other row.
E sits 4th to the right of B. Q faces to E. The number of persons sit to the left of Q is same as sit to the right of S. F sits immediate to the left of D. A sits to the left of C and to the right of F. P faces the one who is an immediate neighbor of A. U is the only neighbor of Q. R sits to the right of T.

16. Four of the following five are alike in a certain way and hence they form a group. Which one of the following does not belong to that group?
(a) R (b) P (c) U
(d) C (e) B

17. Who among the following faces to F?
(a) P (b) U (c) S
(d) R (e) Either (a) or (c)

18. What is the position of F with respect to B?
(a) Immediate to the left
(b) 2nd to the left
(c) 3rd to the right
(d) 4th to the left
(e) Immediate to the right

19. Which of the following is true as per the given information?
(a) S sits to the immediate right of P
(b) U faces to A
(c) F sits at the extreme end
(d) Both (b) and (c) true
(e) All are true

20. Who among the following sits 3rd to the right T?
(a) U (b) None of these (c) S
(d) P (e) R

Direction (21-25): Study the following information carefully and answer the questions given below:

Eight persons i.e. F, J, K, M, N, P, S and V are sitting around a square table. Four of them are sitting at the corners and remaining are sitting at the middle side of the table. The persons sitting at the corners faces away from the center and the persons sitting at the middle sides of the table faces towards the center. All the information is not necessarily in the same order.
F sits at the middle side of the table. N sits at the immediate left of V. Two persons sit between F and J. V sits at the immediate right of J. Three persons sit between S and N. M is an immediate neighbor of S. M is not an immediate neighbor of J. P faces inside.

21. How many persons are sitting between F and J when counting from the left of F?
(a) One (b) Two (c) Three
(d) Four (e) More than four

22. Four of the following five are alike in a certain way and hence form a group, which of the following does not belong to the group?
(a) S (b) F (c) J
(d) K (e) N

23. Which of the following statement is true?
(a) P sits second to the left of V
(b) N is an immediate neighbor of S
(c) Two persons sit between P and V
(d) M sits opposite to N
(e) J sits opposite to K.

24. Who among the following is sitting second to the left of M?
(a) P (b) V (c) J
(d) F (e) None of these

25. Who among the following is sitting opposite to P?
(a) V (b) J (c) F
(d) M (e) None of these

Direction (26-28): Study the following information carefully and answer the questions given below:

There are seven members in a family of three generation. A is mother of P. P is brother of G. K is married to G. S is aunt of M. K is child of L. S is sister of K.

26. If L is married to J, then how J is related to G?
(a) Grand daughter
(b) Grand son
(c) Son-in-law
(d) Daughter-in-law
(e) Can't be determined

27. If A is married to R , then how R is related to M?
(a) Grand father (b) Brother-in-law (c) Uncle
(d) None of these (e) Can't be determined

28. How S is related to G?
(a) Sister (b) Sister-in-law (c) Aunt
(d) Mother-in-law (e) None of these

29. If it is possible to make only one meaningful word with the 2nd , 5th, 8th and 9th letters of the word 'TRANSLATION' which would be the second letter of the word from the left? If more than one such word can be formed give 'Y' as the answer. If no such word can be formed, give 'Z' as your answer.
(a) Y (b) S (c) T
(d) Z (e) R

Directions (30-33): These questions are based on the following arrangement. Study the arrangement carefully to answer these questions.

R Q D 8 H 9 L O P T E F M 6 I A 7 J 5 4 B U 2 G

30. If all the numbers are remove from the series, then which of the following element is 10th from the left end?
(a) R (b) F (c) M
(d) B (e) U

31. How many alphabets according to the English dictionary are between the elements which is 7th from the left end and 9th from the right end?
(a) Five (b) Three (c) Seven
(d) Ten (e) Eight

32. Which of the following element is 3rd from the right of the element which is 11th from the left end?
(a) M (b) I (c) A
(d) 6 (e) R

33. How many such numbers are there in the above arrangement, each of which is immediately preceded by a consonant and also immediately followed by a consonant?
(a) Three (b) One (c) Two
(d) Four (e) None of these

34. If in the number 485794362, 1 is added to each of the digit which is placed at even position and 1 is subtracted from each of the digit which is placed at odd position then how many digits are repeating in the number thus formed?
(a) Only 5 (b) Both 1 & 2 (c) Only 8
(d) Both 1 & 7 (e) None of these

35. Find the odd one out?
(a) BEH (b) JMP (c) TWZ
(d) CFI (e) KOP

QUANTITATIVE APTITUDE

Direction (36-45) : Find the value of (?) in the following questions

36. $\sqrt{124+?+169} = 18$
(a) 34 (b) 31 (c) 33
(d) 35 (e) 32

37. $136 \div 2^2 \times ? = 17\%$ of $500 \div 10$
(a) 0.75 (b) 1.33 (c) 0.25
(d) 1.66 (e) 0.5

38. $115 \div 5 + 12 \times 6 = ? + 64 \div 4 - 35$
(a) 114 (b) 118 (c) 108
(d) 116 (e) 111

39. 41% of $600 - 250 = ? - 77\%$ of 900
(a) 693 (b) 675 (c) 684
(d) 679 (e) 689

40. $\frac{360}{?} = 73 + 3^3$
(a) 3.4 (b) 4.3 (c) 3.1
(d) 3.6 (e) 3.9

41. $\frac{1}{2} - \frac{3}{5} + 4\frac{2}{3} = ? + \frac{5}{6}$
(a) $3\frac{11}{15}$ (b) $5\frac{11}{15}$ (c) $3\frac{11}{12}$
(d) $2\frac{11}{12}$ (e) $4\frac{11}{15}$

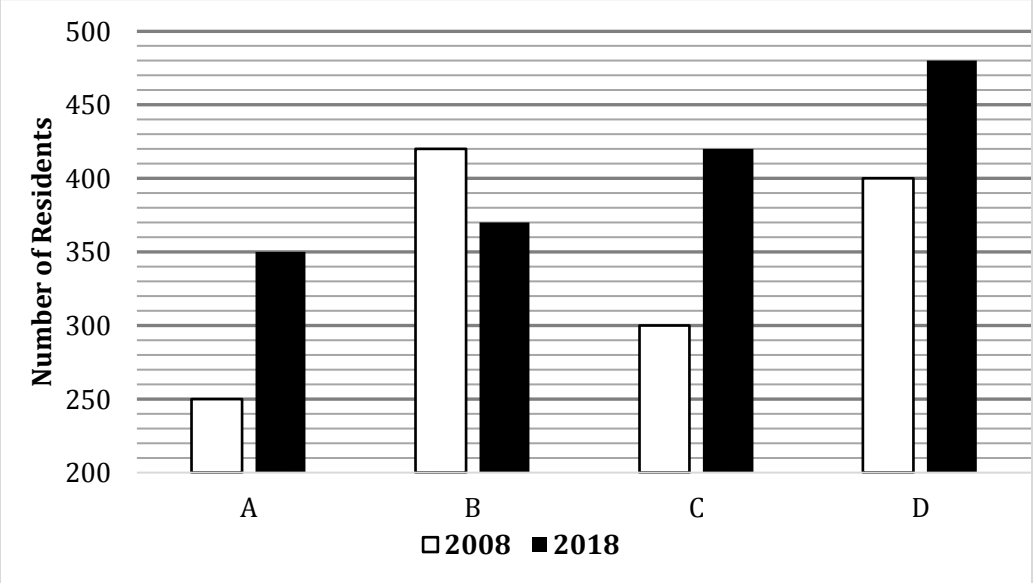
42. $65 \times 3 \div 13 + 67 - ?^2 = 81 \div 9 \times 2$
(a) 9 (b) 5 (c) 12
(d) 8 (e) 14

43. $(2744)^{1/3} + (18)^2 - 121 = ? - 69 \times 5$
(a) 658 (b) 568 (c) 666
(d) 656 (e) 562

44. $1111 \div 11 + 2002 \div 26 + 750 \div 25 = ?$
(a) 204 (b) 212 (c) 208
(d) 206 (e) 210

45. $\frac{5}{11} \times 121 + 1\frac{4}{9} \times 288 = 141 + ?$
(a) 333 (b) 327 (c) 335
(d) 330 (e) 329

Directions (46 – 50): Given bar graph shows the number of residents residing in 4 societies in years 2008, 2018. Read the data carefully and answer the questions carefully.



46. What is average of residents residing in society A in 2008, B in 2018, C in 2018 & D in 2008?
(a) 355 (b) 360 (c) 365
(d) 370 (e) 350

47. Residents residing in society B in 2008 are what percent more/less than average of residents residing in society D in 2008 & 2018?
(a) $5\frac{6}{11}\%$ (b) $3\frac{6}{11}\%$ (c) $6\frac{6}{11}\%$
(d) $7\frac{6}{11}\%$ (e) $4\frac{6}{11}\%$

48. Which society shows maximum percentage increase in no. of residents from year 2008 to 2018?
(a) Both A & C (b) Both A & D (c) Both C & D
(d) Both A & B (e) None of these

49. What is ratio of all residents in all societies in 2008 to that of in 2018?
(a) 142 : 157 (b) 157 : 142 (c) 162 : 137
(d) 137 : 162 (e) 97 : 114

50. What is difference between number of residents residing in society A & B in 2018 together and that of in society C & D together in 2008?
(a) 30 (b) 24 (c) 20
(d) 28 (e) 26

51. A shopkeeper sells two pens, he sold 1 pen at profit and other pen at loss. SP of each of the two pens is Rs.300 and profit percentage on 1 pen is equal to loss percentage on other. If overall loss of shopkeeper is 6.25%, then find difference between cost price of both pen.
(a) Rs.350 (b) Rs.100 (c) Rs.240
(d) Rs.160 (e) Rs.300

52. A man received Rs.3456 when he invested Rs.P at 12% p.a. at SI for 3 years. If he invested Rs. (P + 4400) at 15% p.a. at CI compounding annually for 2 years, then find the interest received by him.
(a) Rs.4515 (b) Rs.4960 (c) Rs.4725
(d) Rs.4185 (e) Rs.4345

53. Time taken by a boat to cover 162 km each in downstream and in upstream is 14 hours and 24 minutes. If speed of stream is 6 km/hr., then find the time taken by boat to cover 240 km in upstream.
(a) $7\frac{1}{3}$ hours (b) $18\frac{2}{3}$ hours (c) $9\frac{1}{3}$ hours
(d) $16\frac{2}{3}$ hours (e) $13\frac{1}{3}$ hours

54. C is 100% more efficient than B. A alone can complete a piece of work in 9 days and B & C together can complete the same work in $2\frac{2}{3}$ days. Find what portion of work will be completed, if A & B works together for 4 days.
(a) $\frac{13}{18}$ (b) $\frac{8}{9}$ (c) $\frac{5}{6}$
(d) $\frac{2}{3}$ (e) $\frac{17}{18}$

55. Ratio of age of P 2 years ago to age of R 2 years hence is 1 : 2 and Q's present age is 25% more than P's present age. If average of present age of P & R is 39 years, then find difference between P's age 5 years hence and R's present age.
(a) 12 years (b) 17 years (c) 21 years
(d) 15 years (e) 14 years

Directions (56–60): Solve the following quadratic equation and mark the answer as per instructions.

56. **I.** $x^2 - 2x - 143 = 0$ **II.** $y^2 - 169 = 0$
(a) x > y
(b) x < y
(c) x ≤ y
(d) x ≥ y
(e) x = y or no relation can be established

57. **I.** $x^2 - 7x - 18 = 0$ **II.** $y^2 - 19y + 90 = 0$
(a) x ≤ y
(b) x = y or no relation can be established
(c) x > y
(d) x ≥ y
(e) x < y

58. **I.** $2x^2 + 5x + 3 = 0$ **II.** $y^2 + 4y - 12 = 0$
(a) x ≤ y
(b) x > y
(c) x = y or no relation can be established
(d) x < y
(e) x ≥ y

59. **I.** $9x + 3y = 15$ **II.** $4x + 5y = 14$
(a) x = y or no relation can be established
(b) x > y
(c) x ≤ y
(d) x < y
(e) x ≥ y

60. **I.** $2x^2 - x - 1 = 0$ **II.** $3y^2 - 5y + 2 = 0$
(a) x ≤ y
(b) x < y
(c) x = y or no relation can be established
(d) x ≥ y
(e) x > y

Directions (61-65): Find the wrong number in the following number series.

61. 2, 3, 6, 15, 45, 156.5, 630
(a) 2 (b) 15 (c) 3
(d) 156.5 (e) 630

62. 36, 20, 12, 8, 6, 5.5, 4.5
(a) 8 (b) 36 (c) 5.5
(d) 4.5 (e) 6

63. 1, 3, 9, 31, 128, 651, 3913
(a) 31 (b) 3 (c) 1
(d) 3913 (e) 128

64. 2, 3, 10, 40, 172, 885, 5346
(a) 40 (b) 885 (c) 172
(d) 3 (e) 10

65. 5, 8, 16, 26, 50, 98, 194
(a) 5 (b) 194 (c) 8
(d) 16 (e) 98

66. A rectangular path of width 3m is surrounding the garden whose length is 3m more than its width. If cost of painting the path at rate of 0.5Rs/m^2 is Rs 273 then find the area of garden
(a) 1525m^2 (b) 1804 m^2 (c) 1776 m^2
(d) 1906 m^2 (e) 1664 m^2

67. In a class percentage of students who passed the exam is 60% and number of boys & girls who passed the exam is same. If boys who failed the exam are 200% more than girls who failed in exam then find the percentage of girls who failed out of total students
(a) 9% (b) 13% (c) 10%
(d) 12% (e) 15%

68. A man invested Rs.X at 15% p.a. at SI for 4 years and Rs. (1.35X) at 18% p.a. at SI for 3 years. If total interest received by man is Rs.15948, then find value of Rs. (3.12X).
(a) Rs.50544 (b) Rs.42764 (c) Rs.32580
(d) Rs.47372 (e) Rs.37440

69. A man covers $6\frac{1}{4}$% distance via bus at 80 km/hr, 25% of the distance via car at 120 km/hr., 30% distance via bicycle at 32 km/hr. and remaining distance via train at 62 km/hr. If total distance covered by man is 640km, then find the total time taken man during the entire journey.
(a) $\frac{65}{6}$ hours (b) 13 hours (c) $\frac{44}{3}$ hours
(d) $\frac{31}{2}$ hours (e) $\frac{71}{6}$ hours

70. Average weight of a class is 60kg and average weight of boys in the class is 80kg. Ratio of boys to girls in the class is 5 : 4. If there are 72 students in the class, then find the average weight of girls in the class.
(a) 54 kg (b) 42 kg (c) 35 kg
(d) 45 kg (e) 38 kg

ENGLISH LANGUAGE

Directions (71-78): Read the following passage carefully and answer the questions given below them.

Animals of all sorts live together in various ecosystems. Within these natural communities, the animals eat specific diets that connect them together in a food chain. The three diets of animals include creatures that eat only plants, those that eat only meat, and animals that eat both plants and meat. Animals that eat plants exclusively are herbivores, and animals that eat only meat are carnivores. When animals eat both plants and meat, they are called omnivores. The balance of an ecosystem depends on the

presence of every type of animal. If one type of animal becomes too numerous or scarce, the entire balance of the ecosystem will change.

Carnivores will feed on herbivores, omnivores, and other carnivores in an ecosystem. A natural community depends on the presence of carnivores to control the populations of other animals. Large carnivores include wolves and mountain lions. A large carnivore might hunt down large herbivores such as elk and deer. Medium-sized carnivores include hawks and snakes, and these animals typically feed on rodents, birds, eggs, frogs, and insects. Examples of small carnivores include some smaller birds and toads. These carnivores may eat insects and worms. Carnivorous animals have strong jaws and sharp teeth to enable them to tear and rip prey. These animals often have long, sharp claws that they also use to tear prey. Carnivores depend on sufficient prey in the food chain to give them the food they need. If the herbivore population or the population of other carnivores declines in an ecosystem, carnivores may not survive.

With a diet comprised of only plants, herbivores can be surprisingly large animals. Examples of large herbivores include cows, elk, and buffalo. These animals eat grass, tree bark, aquatic vegetation, and shrubby growth. Herbivores can also be medium-sized animals such as sheep and goats, which eat shrubby vegetation and grasses. Small herbivores include rabbits, chipmunks, squirrels, and mice. These animals eat grass, shrubs, seeds, and nuts. An ecosystem must provide _____(1) plants to sustain herbivores, and many of them spend the majority of their lives eating to stay alive. If plant availability declines, herbivores may not have enough to eat. This could cause a decline in herbivore numbers, which would also impact carnivores. Herbivores usually have special biological systems to digest a variety of different plants. Their teeth also have special designs that enable them to rip off the plants and then grind them up with flat molars.

Omnivores have an advantage in an ecosystem because their diet is the most diverse. These animals can vary their diet depending on the food that is most plentiful, sometimes eating plants and other times eating meat. Herbivores have different digestive systems than omnivores, so omnivores usually cannot eat all of the plants that an herbivore can. Generally, omnivores eat fruits and vegetables freely, but they can't eat grasses and some grains due to digestive limitations. Omnivores will also hunt both carnivores and herbivores for meat, including small mammals, reptiles, and insects. Large omnivores include bears and humans. Examples of medium-sized omnivores include raccoons and pigs. Small omnivores include some fish and insects such as flies. Omnivore teeth often resemble carnivore teeth because of the need for tearing meat. Omnivores also have flat molars for grinding up food.

71. Why the balance of the ecosystem depends on each kind of animal?
(a) Scarcity or abundant of a single kind can cause disturbance in the ecosystem balance.
(b) Carnivores and Omnivorous should be less in number than herbivorous.
(c) Specific diets of each kind of animals bring food chain in sync.
(d) Both (b) and (c)
(e) None of these

72. How natural community depends upon Carnivores?
(a) They feed on grass eating, plant and meat eating animals.
(b) They feed on other carnivores.
(c) They control populations of other animals.
(d) All (a), (b), and (c)
(e) None of these

73. What is the threat to survival of carnivores?
(a) Insufficient number of preys in the food chain.
(b) Decline in population of herbivores and other carnivores
(c) Both (a) and (b)
(d) Only (b)
(e) None of these

74. Which of the following statement(s) is/are true about herbivores?
(a) Their diet include only vegetation
(b) Their survival depends upon abundant plants
(c) A major part of herbivores' life is spent on eating
(d) They have a digestive system suitable to digest diverse kind of plants
(e) All of the above

75. Why Omnivores are said to have an advantage?
(a) Diverse diet
(b) Both (a) and (c)
(c) Diet depends upon food which is available in plentiful amount.
(d) Only (a)
(e) Only (c)

76. Which is the following can fill the blank (1) as given in the passage, to make the sentence grammatically and contextually correct?
(a) Largely (b) Abundant (c) Diversity
(d) Quite (e) None of these.

77. Which of the following words is most similar in meaning as BALANCE, highlighted in the given passage?
(a) Affecting (b) Poignant (c) Equilibrium
(d) Considerate (e) None of these.

78. Which of the following words is most opposite in meaning with SUFFICIENT, highlighted in the given passage?
(a) Inadequate (b) Ample (c) Plenty
(d) Enough (e) None of these.

Directions (79-84): In the following passage there are blanks, each of which has been numbered. These numbers are printed below the passage and against each, five options are given. Find out the appropriate word which fits the blank appropriately to make a grammatically and contextually correct sentence.

Two decades have passed since the mid-day meal became a part of the daily routine in government schools nationwide. In this long passage of time, procedures have _____ (79) but accidents continue to occur. Funds from the Centre flow smoothly though procurement of food items faces hurdles of different kinds. The latest _____ (80) in mid-meal stories concerns milk. Government norms entitle every child to receive 150 ml of milk as part of the mid-day meal. However, a video revealed recently how one litre of milk was mixed in a bucketful of water so that it would _____ (81) for the more than 80 children present that day in a school in rural Uttar Pradesh (U.P.). This was somewhat similar to the one reported from U.P. a couple of months ago. In the earlier incident, a video showed plain chapatis being served with salt. The two videos made it to the national media; they also proved useful for the officers who _____ (82) the mid-day meal scheme since they also depend on unauthorised videographers to learn about the reality in schools. Each such revelation leads to the same _____ (83) official statement: punish the guilty, locate the video-maker and deal with him/her. In the latest mid-meal story narrated above, authorities in U.P. have reportedly done the _____ (84) needful, i.e. they have fired the apparent culprit who is a para-teacher.

79. (a) Balances (b) Stabilized (c) Persistent
(d) Stabilizing (e) None of these.

80. (a) Stained (b) Retaliate (c) Accusations
(d) Blunder (e) None of these.

81. (a) Suffice (b) Assent (c) Patriotism
(d) Benefit (e) None of these.

82. (a) React (b) Negate (c) Supervise
(d) Unify (e) None of these.

83. (a) Amalgamate (b) Reflexive (c) Applicable
(d) Unlikely (e) None of these.

84. (a) Permit (b) Annihilate (c) Customary
(d) Stride (e) None of these.

Directions (85-89): Each question below has one blank, which is indicating that something has been omitted. Choose the most suitable option indicating the words that can be used to fill up the blank in the sentence to make it meaningfully complete.

85. Maharashtra has been _____into a new party system over the past few years, with the BJP trying hard to replace the Congress as the dominant party in the State.
(i) Investigated
(ii) Transitioning
(iii) Framing
(a) Only (i)
(b) Only (ii)
(c) Both (ii) and (iii)
(d) Both (i) and (ii)
(e) None of these.

86. The theme song of Downton Abbey along with a panoramic shot of the imposing monarchic structure is enough to _____ memories.
(i) Evoke
(ii) Recall
(iii) Sent
(a) Only (i)
(b) Only (ii)
(c) Both (ii) and (iii)
(d) Both (i) and (ii)
(e) None of these.

87. With tomato and onion prices continuing to soar, the Centre is considering a _____ to increase cultivation of these staple vegetables in the north Indian region.
(i) Proposal
(ii) Role
(iii) Novel
(a) Only (i)
(b) Only (ii)
(c) Both (ii) and (iii)
(d) Both (i) and (ii)
(e) None of these.

88. The Railways will speed up trains to reduce running time and maximise _____ of infrastructure across its network.
(i) Collecting
(ii) Effectiveness
(iii) Utilisation
(a) Only (i)
(b) Only (ii)
(c) Both (ii) and (iii)
(d) Both (i) and (ii)
(e) None of these.

89. There could be more interest rate _____ by the RBI as some of the members of the monetary policy committee have observed that growth is yet to bottom out
(i) Increment
(ii) Cuts
(iii) Growths
(a) Only (i)
(b) Only (ii)
(c) Both (ii) and (iii)
(d) Both (i) and (ii)
(e) None of these.

Directions (90-94): In each of the questions given below four words are given in bold. These four words may or may not be in their correct position. The sentence is then followed by options with the correct combination of words that should replace each other in order to make the sentence grammatically and contextually correct. Find the correct combination of the words that replace each other. If the sentence is correct as it then select option (e) as your choice.

90. Today, thermal **accounts** (A) capacity **generation** (B) for about two-thirds the **installed**(C) generation **capacity**(D) in the country.
(a) A-B (b) A-C (c) B-D
(d) C-D (e) The sentence is correct

91. The IMF **followed**(A) the World Bank in **reducing**(B) its forecast for India's **economic**(C) growth in the current **financial**(D) year.
(a) A-B (b) A-C (c) B-D
(d) C-D (e) The sentence is correct

92. In **pursuit** (A) of novel ways to draw **caught** (B) to the Big Prize, the **Academy**(C) seems to have been **attention** (D) on the wrong foot again.
(a) A-B (b) A-C (c) B-D
(d) C-B (e) The sentence is correct

93. With **power** (A) growth, the **demand**(B) for **economic** (C) in India is only going to **increase**(D) further.
(a) A-B (b) A-C (c) B-D
(d) C-D (e) The sentence is correct

94. The Air Quality Index of Delhi **worsened**(A) slightly and **expected** (B) in the "poor" category and is **stayed** (C) to further **deteriorate**(D) from the last week of the month.
(a) A-B (b) A-C (c) B-C
(d) C-D (e) The sentence is correct

Direction (95-100): The following questions consist of a sentence. Four of the words of the sentences are marked in bold, which may or may not be correctly spelled. Option corresponding to misspelt word is your answer. If there is no misspelled word in the sentence then choose (d), i.e., 'All are correct' as your answer.

95. **Education**, for most of us, is a necessary public good central to the task of nation **building** and, like fresh air, is **neccessary** to make our **communities** come alive.
(a) Education (b) Building (c) Neccessary
(d) Communities (e) All are correct

96. The Budget's **provisons** for collecting more in taxes from the **incomes** of the super-rich were aimed at **redistributing** wealth to bring about more **equitable** development.
(a) Provisons (b) Incomes (c) Redistributing
(d) Equitable (e) All are correct

97. Ideas **rejected** more than two **decades** ago during the **liberalisaetion** phase are back in **circulation**.
(a) Rejected
(b) Decades
(c) Liberalisaetion
(d) Circulation
(e) All are correct

98. The proposal to **establish** a National Research Foundation, with an "**overarching** goal to enable a culture of research to **permeate** through our universities" needs to be **applauded** and widely supported.
(a) Establish (b) Overarching (c) Permeate
(d) Applauded (e) All are correct

99. **Policymaking** has three **essenteal** ingredients: technical elements, **administrative** inputs and political goals and **packaging**.
(a) Policymaking
(b) Essenteal
(c) Administrative
(d) Packaging
(e) All are correct

100. The Central **Bureou** of Investigation has set up an Online Child Sexual **Abuse** and **Exploitation** Prevention/**Investigation** Unit.
(a) Bureou (b) Abuse (c) Exploitation
(d) Investigation (e) All are correct

Solutions

REASONING ABILITY

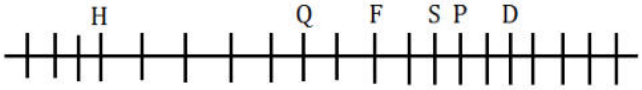
Direction (1-5):

Month	Persons
January	E
April	D
May	G
June	F
July	H
August	A
October	B
December	C

1. (a); 2. (d); 3. (c);

4. (b); 5. (c);

Direction (6-10):



6. (a); 7. (c); 8. (d);

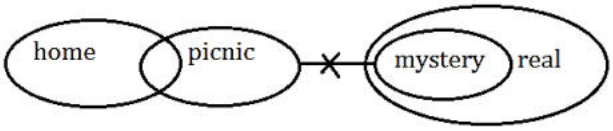
9. (b); 10. (e);

11. (c);

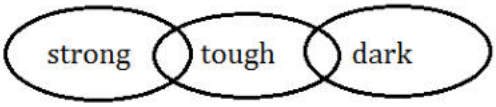
C H L O R I N E

Direction (12-15):

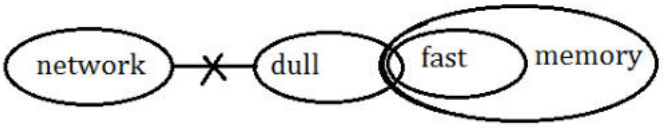
12. (a);



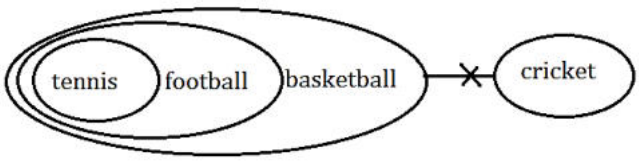
13. (d);



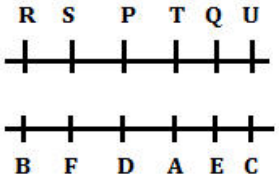
14. (e);



15. (e);



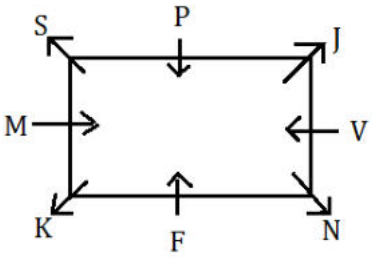
Direction (16-20):



16. (b); 17. (c); 18. (e);

19. (a); 20. (e);

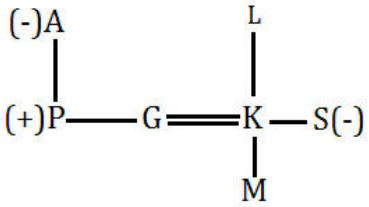
Direction (21-25):



21. (d); 22. (b); 23. (e);

24. (a); 25. (c);

Direction (26-28):



26. (e); 27. (a); 28. (b);

29. (c); "STIR"

Direction s (30-33):

30. (b); 31. (d); 32. (d);

33. (c);

34. (c);

4 8 5 7 9 4 3 6 2
3 9 4 8 8 5 2 7 1

35. (e);

QUANTITATIVE APTITUDE

36. (b); 293 + ? = 324
? = 31

37. (c); $34 \times ? = \frac{17}{100} \times 500 \times \frac{1}{10}$
$? = \frac{8.5}{34} = 0.25$

38. (a); 23 + 72 = ? + 16 – 35
? = 114

39. (e); 246 – 250 = ? – 693
? = 689

40. (d); $\frac{360}{?} = 73 + 27$
? = 3.6

41. (a); $\frac{1}{2} - \frac{3}{5} + \frac{14}{3} = ? + \frac{5}{6}$
$\frac{15-18+140}{30} - \frac{5}{6} = ?$
$? = \frac{112}{30} = 3\frac{11}{15}$

42. (d); $15 + 67 - ?^2 = 18$
? = 8

43. (e); 14 + 324 – 121 = ? – 345
? = 562

44. (c); 101 + 77 + 30 = ?
? = 208

45. (d); 55 + 416 = 141 + ?
? = 330

46. (b); required average = $\frac{250+370+420+400}{4} = 360$

47. (e); average of total residents in society D in 2008 & 2018= $\frac{400+480}{2} = 440$
Required % = $\frac{440-420}{440} \times 100 = 4\frac{6}{11}\%$

48. (a); society A = $\frac{350-250}{250} \times 100 = 40\%$
Society B = $\frac{370-420}{420} \times 100 = 11.9\%$ (decrease)
Society C = $\frac{420-300}{300} \times 100 = 40\%$
Society D = $\frac{480-400}{400} \times 100 = 20\%$
Maximum increase in society A & C

49. (d); all residents in 2008 = 250 + 420 + 300 + 400
= 1370
Total residents in 2018 = 350 + 370 + 420 + 480
= 1620
Required ratio = 1370 : 1620 = 137 : 162

50. (c); required difference = (350 + 370) – (300 + 400)
= 20

51. (d); Cost price of both pens = $(300 \times 2) \times \frac{100}{93.75}$
= Rs.640
Let profit percentage and loss percentage earned on both pens be x%.
ATQ,
$300 \times \frac{100}{100+x} + 300 \times \frac{100}{100-x} = 640$
$30000 \times \frac{200}{(100)^2-x^2} = 640$
$\frac{1}{10000-x^2} = \frac{1}{9375}$
$x = 25$
Required difference = $300 \times \frac{100}{100-25} - 300 \times \frac{100}{100+25}$
$= 400 - 240$
= Rs.160

52. (a); ATQ,
$\frac{P \times 12 \times 3}{100} = 3456$
$P = Rs.\ 9600$
Required amount
$= \left((9600 + 4400)\left(1 + \frac{15}{100}\right)^2 - (9600 + 4400)\right)$
$= 18515 - 14000$
= Rs.4515

53. (e); Let speed of boat in still water be x km/hr.
ATQ,
$\frac{162}{x+6} + \frac{162}{x-6} = \frac{72}{5}$
$x = 24$ kmph
Required time = $\frac{240}{24-6} = 13\frac{1}{3}$ hours

54. (e); Let efficiency of B be x units/day
So, efficiency of C = $x \times \frac{200}{100}$
= 2x units/day
Now, total work = $(x + 2x) \times \frac{8}{3} = 8x$ units
Hence, efficiency of A = $\frac{8x}{9}$ units/day
Work completed by A & B together in 4 days = $\left(\frac{8x}{9} + x\right) \times 4 = \frac{68x}{9}$ units
Required portion = $\frac{\frac{68x}{9}}{8x} = \frac{17}{18}$

55. (b); Let present age of P be 4x years.
So, present age of Q = $\frac{125}{100} \times 4x$
= 5x years
Now, present age of R = $(4x - 2) \times 2 - 2$
$= (8x - 6)$years
ATQ,
$\frac{4x+8x-6}{2} = 39$
$x = 7$
Required difference = $(8 \times 7 - 6) - (4 \times 7 + 5)$
$= 50 - 33 = 17$ years

56. (e); **I.** $x^2 - 13x + 11x - 143 = 0$
$(x - 13)(x+11) = 0$
$x = -11, 13$
II. $y^2 = 169$
$y = \pm 13$
clearly, no relation can be established

57. (a); **I.** $x^2 - 9x + 2x - 18 = 0$
$(x - 9)(x + 2) = 0$
$x = -2, 9$
II. $y^2 - 10y - 9y + 90 = 0$
$(y - 10)(y - 9) = 0$
$y = 9, 10$
clearly, $x \leq y$

58. (c); **I.** $2x^2 + 3x + 2x + 3 = 0$
$(x + 1)(2x + 3) = 0$
$x = -1, -\frac{3}{2}$
II. $y^2 + 6y - 2y - 12 = 0$
$(y - 2)(y + 6) = 0$
$y = 2, -6$
clearly, no relation can be established

59. (d); (II) × 9 – (I) × 4
On solving,
$x = 1, y = 2$
clearly, $x < y$

60. (c); I. $2x^2 - 2x + x - 1 = 0$
$(2x + 1)(x - 1) = 0$
$x = -\frac{1}{2}, 1$
II. $3y^2 - 3y - 2y + 2 = 0$
$(3y - 2)(y - 1) = 0$
$y = \frac{2}{3}, 1$
clearly, no relation

61. (d); Wrong number =156.5
Pattern of series-

2	3	6	15	45	157.5	630
	×1.5	×2	×2.5	×3	×3.5	×4

So, there should be 157.5 in place of 156.5.

62. (c); Wrong number= 5.5
Pattern of series-

36	20	12	8	6	5	4.5
	-16	-8	-4	2	-1	-0.5
		÷2	÷2	÷2	÷2	÷2

So, there should be 5 in place of 5.5

63. (e); Wrong number =128
Pattern of series –

1	3	9	31	129	651	3913
	×1+2	×2+3	×3+4	×4+5	×5+6	×6+7

So, there should be 129 in place of 128

64. (a); Wrong number = 40
Pattern of series –

2	3	10	39	172	885	5346
	×1+1²	×2+2²	×3+3²	×4+4²	×5+5²	×6+6²

So, there should be 39 in place of 40.

65. (d); Wrong number = 16
Pattern of series –

5	8	14	26	50	98	194
	×2-2	×2-2	×2-2	×2-2	×2-2	×2-2

So, there should be 14 in place of 16.

66. (b); Let width of garden = x m
So length of garden = (x+3)m
According to question
$(x + 6)(x + 9) - x(x + 3) = \frac{273}{0.5}$
$x^2 + 15x + 54 - x^2 - 3x = 546$
$12x + 54 = 546$
$x = 41$
Area of garden = 41 × 44
= 1804 m^2

67. (c); Let total students be 100x
Then passed students be 60x
Passed boys & girls are 30x each.
Let failed girls = y
Now
$y + 3y = 40x$
$4y = 40x$
$y = 10x$
Required percentage = 10%

68. (e); ATQ,
$\frac{X \times 15 \times 4}{100} + \frac{1.35X \times 18 \times 3}{100} = 15948$
$0.60X + 0.729X = 15948$
$X = 12000$
Required value = 3.12 × 12000
= Rs.37440

69. (e); Distance covered by bus = $\frac{25}{400} \times 640$
= 40km
Distance covered by car = $\frac{25}{100} \times 640$
= 160 km
Distance covered by bicycle
= $\frac{30}{100} \times 640 = 192$ km
And distance covered by train
= $(640 - (40 + 160 + 192)) = 248$ km
Required time = $\frac{40}{80} + \frac{160}{120} + \frac{192}{32} + \frac{248}{62} = \frac{71}{6}$ hours

70. (c); Number of boys in the class = $72 \times \frac{5}{9} = 40$
Number of girls in the class = $72 \times \frac{4}{9} = 32$
Required average = $\frac{(60 \times 72) - (40 \times 80)}{32} = \frac{4320 - 3200}{32}$ =
35 kg

ENGLISH LANGUAGE

71. (a); Refer to the first paragraph. The hint can be drawn from the lines, 'The balance of an ecosystem depends on the presence of every type of animal. If one type of animal becomes too numerous or scarce, the entire balance of the ecosystem will change.'
In this way, **option (a)** is justified with the given lines. Hence, it is the correct answer choice.

72. (d); Refer to the second paragraph. The hint can be drawn from the lines, 'Carnivores will feed on herbivores, omnivores, and other carnivores in an ecosystem. A natural community depends on the presence of carnivores to control the populations of other animals.'
Option (a), (b), and (c) are justified with the above lines. Hence option (d)**[All (a), (b), and (c)]** is the right answer choice.

73. (c); Refer to the last part of second paragraph. The hint can be drawn from the lines, 'Carnivores depend on sufficient prey in the food chain to give them the food they need. If the herbivore population or the population of other carnivores declines in an ecosystem, carnivores may not survive.'
From these lines, both **option (a) and (b)** are justifies. Hence, **option (c)[Both (a) and (b)]** is the right answer choice.

74. (e); Refer to the third paragraph. The hint can be drawn from the lines;
Option (a): With a diet comprised of only plants, herbivores can be surprisingly large animals.
Option (b): An ecosystem must provide abundant plants to sustain herbivores
Option (c): many of them spend the majority of their lives eating to stay alive
Option (d): Herbivores usually have special biological systems to digest a variety of different plants.
Hence, **option (e), [All of the above]** is the right answer choice.

75. (b); Refer to the fourth paragraph. The hint can be drawn from the lines:
Option (a): Omnivores have an advantage in an ecosystem because their diet is the most diverse.
Option (c): These animals can vary their diet depending on the food that is most plentiful, sometimes eating plants and other times eating meat.
Hence, **option (b), [Both (a) and (c)]** is the right answer choice.

76. (b); **Abundant** can fill in the blank **(1)** to make the sentence grammatically and contextually correct. Hence, option (b) is the right answer choice.

77. (c); **Equilibrium** is most similar in meaning with the given word. Hence, **option (c)** is the right answer choice.

78. (a); **Inadequate** is most opposite in meaning with the given word. Hence, **option (a)** is the right answer choice.

79. (b); **Stabilized** can fit the blank (79) to make it grammatically and contextually correct sentence. Hence, option (b) is the right answer choice.

80. (d); **Blunder** can fit the blank (80) to make it grammatically and contextually correct sentence. Hence, option (d) is the right answer choice.

81. (a); **Suffice** can fit the blank (81) to make it grammatically and contextually correct sentence. Hence, option (a) is the right answer choice.

82. (c); **Supervise** can fit the blank (82) to make it grammatically and contextually correct sentence. Hence, option (c) is the right answer choice.

83. (b); **Reflexive** can fit the blank (83) to make it grammatically and contextually correct sentence. Hence, option (b) is the right answer choice.

84. (c); **Customary** can fit the blank (84) to make it grammatically and contextually correct sentence. Hence, option (c) is the right answer choice.

85. (b); From the given options, (i) will make the given sentence grammatically incorrect whereas option (iii) is out of context. So, only 'Transitioning' will fit the given blank to make the given sentence both grammatically and contextually correct. Hence, the correct answer choice would be option (b)

86. (d); Evoke means bring or recall.
So, from the given options, 'Evoke' and 'Recall' fits the given blank to make the given sentence both grammatically and contextually correct. Hence, the correct answer choice would be option (d)

87. (a); From the given options, option (ii) and (iii) will make the given sentence contextually meaningless. So, only 'proposal' fits the given blank to make the given sentence both grammatically and contextually correct. Hence, the correct answer choice would be option (a)

88. (c); As the given sentence is talking about increasing the speed of trains to reduce running time and about the infrastructure across the railway network, the appropriate filler for the given blank would be 'Effectiveness' and 'utilisation'. Hence, the correct answer choice would be option (c)

89. (b); Taking hint from the last part of the sentence which is talking about the low growth, the appropriate filler for the given blank would be 'cuts'. Hence, the correct answer choice would be option (b)

90. (a); In the given sentence, 'Accounts' and 'Generation' at their current position fails to impart valid meaning to the sentence. But interchanging them will make the given sentence both grammatically and contextually correct. Hence, the correct answer choice would be option (a)

91. (e); All of the given highlighted words are correct at their respective position. Hence, the correct answer choice would be option (e)

92. (c); In the given sentence, 'caught' and 'attention' at their current position are incorrect as they fails to impart valid meaning to the sentence but interchanging them will make the sentence both grammatically and contextually correct. Hence, the correct answer choice would be option (c)

93. (b); In the given question, 'Economic' at its current position fails to impart reasonable meaning to the sentence, also, it is not in accordance with the sentence structure. But, interchanging it with 'Power' will make the given sentence both grammatically and contextually correct. Hence, the correct answer choice would be option (b)

94. (c); In the given statement, 'stayed' and 'expected' at their current position fails to add a reasonable sense in the sentence but interchanging them will make the given sentence both grammatically and contextually correct. Hence, the correct answer choice would be option (c)

95. (c); From the given words, spelling of 'Neccessary' is incorrect, instead it should be 'Necessary' which means essential. Hence, the correct answer choice would be option (c)

96. (a); From the given words, spelling of 'Provisons' is incorrect instead it should be 'Provisions' which means the action of providing or supplying something for use. Hence, the correct answer choice would be option (a)

97. (c); From the given options, spelling of 'Liberalisaetion' is incorrect instead it should be 'Liberalisation' which means the removal or loosening of restrictions on something. Hence, the correct answer choice would be option (c)

98. (e); There is no spelling error in the highlighted words. Hence, the correct answer choice would be option (e)

99. (b); From the given options, spelling of 'esseteal' is incorrect instead it should be 'essential' which means absolutely necessary; extremely important. Hence, the correct answer choice would be option (b)

100. (a); From the given words, spelling of 'Bureou' is incorrect instead it should be 'Bureau' which means an office or department for transacting particular business. Hence, the correct answer choice would be option (a)

REASONING ABILITY

Directions (1 - 5): Study the given information carefully and answer the given questions:

Seven persons A, B, C, D, E, F and G are watching movies on different days of the week (starting on Monday and ending on Sunday) not necessarily in the same order. B is going to watch movie on Tuesday. F is going to watch movie on adjacent day of B. There are three days gap between the days on which F and A are going to watch movie. G is going to watch movie just after D. There are as many persons are watching movie between A and G, same as between D and C. C is watching movie before D but not just before.

1. Who among the following is going to watch movie on Wednesday?
(a) B (b) C (c) F
(d) E (e) None of these

2. Who among the following person is going to watch movie just after A?
(a) C (b) D (c) F
(d) G (e) None of these

3. If F and G interchange their days of watching movie, then on which day G is watching movie?
(a) Monday (b) Wednesday (c) Friday
(d) Saturday (e) None of these

4. C is watching movie on which day?
(a) Friday (b) Saturday (c) Wednesday
(d) Thursday (e) Tuesday

5. How many persons are watching movie between B and A?
(a) Two (b) Three (c) One
(d) Four (e) None of these

Directions (6-8): Study the following information carefully and answer the questions given below:

There are six persons who all are of different height. A is taller than C and D but shorter than E. The one who is third shortest is 102cm in height. B is taller than A. E is not the tallest. The one who is second tallest is 119cm in height. Neither A nor C is the third shortest person among all. C is not the shortest among all. F is taller than D.

6. Who among the following is the second tallest?
(a) F (b) E (c) A
(d) C (e) None of these

7. What will be the possible height of A?
(a) 120cm (b) 100cm (c) 112cm
(d) 101cm (e) None of these

8. Who among the following is third shortest?
(a) A (b) C (c) B
(d) F (e) None of these

Direction (9-13): Study the following information carefully and answer the given questions.

Twelve persons are sitting in two parallel rows at equal distance facing each other. Q, R, S, T, U and V are sitting in Row 1 facing south. B, C, D, E, F and G are sitting in Row 2 facing north (but not necessarily in the same order).

G sits third to the right of B and one of them sits at the end of the row. Q sits at the right end of the row. Three persons sit between Q and T. F sits to the immediate left of G. Two persons sit between F and C. C who faces R sits to the immediate right of E. S faces D. U sits to the immediate left of S.

9. Which of the following pair sits at the extreme ends of the Row 2?
(a) B & E (b) G & E (c) B & C
(d) G & C (e) None of these

10. Who sits second to the left of the person facing V?
(a) B (b) D (c) F
(d) C (e) G

11. What is the position of U with respect to R?
(a) Third to the left
(b) Second to the left
(c) Second to the right
(d) Third to the right
(e) None of these

12. Who is facing F?
(a) T (b) U (c) Q
(d) S (e) None of these

13. If the positions of all persons sitting in Row 2 are arranged as per the English alphabetical order from left to right, then who among the following faces D?
(a) Q (b) R (c) S
(d) T (e) None of these

Directions (14-16): In each of the following questions some statements are given and these statements are followed by two conclusions numbered (I) and (II). You have to take the given statements to be true even if they seem to be at variance from commonly known facts. Read the conclusions and then decide which of the given conclusions logically follows from the given statements, disregarding commonly known facts.

Give answer:
(a) If only (I) conclusion follows.
(b) If only (II) conclusion follows.
(c) If either (I) or (II) follows.
(d) If neither (I) nor (II) follows.
(e) If both (I) and (II) follow.

14. **Statements:** All DSLR are Lenses.
Some Camera are DSLR.
Conclusions: I. All camera is lenses.
II. Some lenses are camera.

15. **Statements:** All Label are Packets.
All Mobiles are Cables.
Some Mobiles are packets.
Conclusions: I. Some Label is mobile.
II. Some Cables are Label.

16. **Statements:** Some Book are Pen.
Some Pens are Pencil.
Conclusions: I. No Book is pencil.
II. All Pencils are Book.

Directions (17-21): Study the following information to answer the given questions

Eight students A, B, C, D , E, F, G and H are sitting around a square table in such a way four of them sit at four corners while four sit in the middle of each of the four sides. The one who sit at the corners face the centre and others facing outside.

A who faces the centre sits third to the left of F. E who faces the centre is not an immediate neighbour of F. Only one person sits between F and G. D sits second to right of B. B faces the centre. C is not an immediate neighbour of A.

17. Which one does not belong to that group out of five ?
(a) B (b) C (c) E
(d) D (e) A

18. Which will come in the place of ?
BCE EHA AGD ?
(a) DFB (b) DGA (c) DCG
(d) DCF (e) None of these

19. What is the position of G with respect to C ?
(a) Third to the right
(b) Second to the left
(c) Second to the right
(d) Fourth to the right
(e) None of these

20. Who sits third to the left of B ?
(a) H (b) A (c) G
(d) F (e) None of these

21. Which is true from the given arrangement?
(a) G faces the centre
(b) B faces outside
(c) H faces inside
(d) A face the centre
(e) None of these

22. How many pairs of letter are there in the word 'DECLARING' (both backward and forward), each of which has as many letters between them as in the word as there are in the English alphabet?
(a) One (b) three (c) Four
(d) Five (e) None of these

Directions (23-25): Study the following information carefully and answer the questions given below:

Point C is 15m in the east of point F. Point A is 10m west of point B which is 15m north of point H. Point D is 15 west of point E. Point B is 15 m south of point C. Point E is 5m east of point H. Point G is 15m north of point A.

23. In which direction and at what distance is point G from point C?
(a) 10m east (b) 5m, east (c) 10m, west
(d) 5m, west (e) None of these

24. Point D is in which direction with respect to point A?
(a) South (b) North (c) North East
(d) West (e) None of these

25. Point F is in which direction with respect to point E?
(a) North East (b) South West (c) South East
(d) North West (e) None of these

Directions (26-30): Following questions are based on the five words given below, Study the following words and answer the following questions.
TAP NOT MAT PQR STB
(The new words formed after performing the mentioned operations may not necessarily be a meaningful English word.)

26. If the given words are arranged in the order as they appear in a dictionary from right to left, which of the following will be second from the left end?
(a) MAT (b) NOT (c) STB
(d) TAP (e) None of these

27. How many letters are there in the English alphabetical series between the third letter of the word which is second from the left end and the second letter of the word which is third from the right end?
(a) 20 (b) 19 (c) 18
(d) 17 (e) None of these

28. If in each of the word given, the second alphabet is replaced by its following alphabet and third alphabet is replaced by its preceding alphabet as per the English alphabetical order, then how many words thus formed will be without any vowels?
(a) None (b) One (c) Two
(d) Three (e) Four

29. If the positions of the first and the third alphabet in each of the words given are interchanged, then how many meaningful word will be formed?
(a) Two (b) One (c) Four
(d) Three (e) None

30. If in each of the given words, every consonant is changed to its previous letter and every vowel is changed to its next letter according to the English alphabetical series, then in how many words, thus formed, at least one vowels will appear?
(a) None (b) One (c) Two
(d) Three (e) None of these

Directions (31-35): Study the following information carefully and answer the questions given below:

There are seven persons i.e. A, B, C, D, E, F and G. They all belongs to the different cities i.e. Kolkata, Mumbai, Chennai, Pune, Lucknow, Ahmadabad and Delhi but not necessarily in the same order. D belongs to Pune. Neither A nor F belongs to Kolkata. B belongs to Ahmedabad. C does not belong to Kolkata and Lucknow. G belongs to Mumbai. A does not belongs to Lucknow and Chennai.

31. Who among the following belongs to Kolkata?
(a) A (b) D (c) F
(d) G (e) None of these

32. Which of the following statement is true?
(a) A belongs to Chennai
(b) G belongs to Delhi
(c) E belongs to Kolkata
(d) F belongs to Pune
(e) None of these

33. F belongs to which of the following City?
(a) Chennai (b) Mumbai (c) Delhi
(d) Lucknow (e) None of these

34. Which of the following combination is true?
(a) A-Delhi
(b) D-Pune
(c) E-Kolkata
(d) All are correct
(e) All are incorrect

35. A belongs to which of the following city?
(a) Delhi (b) Mumbai (c) Kolkata
(d) Chennai (e) None of these

QUANTITATIVE APTITUDE

Directions (36-40): What will come in the place of question (?) mark in the following number series.

36. 200, 193, 179, 158, ?, 95
(a) 135 (b) 133 (c) 132
(d) 130 (e) 128

37. 3, 43, 81, 115, 143, ?
(a) 163 (b) 172 (c) 166
(d) 160 (e) 168

38. 1, 6, 25, 76, 153, ?
(a) 152 (b) 154 (c) 153
(d) 155 (e) 156

39. 50, 54, 45, 61, 36, ?
(a) 66 (b) 72 (c) 75
(d) 80 (e) 84

40. 9, 45, 180, 540, ?, 1080
(a) 720 (b) 900 (c) 1080
(d) 1200 (e) 960

41. If the sum of upstream and downstream speed is 36 km/hr and the speed of the current is 3km/hr . Then find time taken to cover 52.5 km in downward?
(a) 2 hr (b) 2.5 hr (c) 3 hr
(d) 3.5 hr (e) 4 hr

42. A sum becomes 1.6 times of itself in five years at simple rate of interest. Find rate of interest per annum?
(a) 10% (b) 12.5% (c) 15%
(d) 12% (e) 8.5%

Directions (43-52): Calculate the exact value of the 'x' in the given following questions.

43. $x^2 + (9^2 + 34) \div 5 = 39$
(a) 5 (b) 4 (c) 8
(d) 6 (e) 9

44. $6 \times 16 \times 5 \div 3 - x^2 = 96$
(a) 6 (b) 7 (c) 8
(d) 9 (e) 5

45. $\sqrt{124 + x + 169} = 18$
(a) 27 (b) 28 (c) 29
(d) 30 (e) 31

46. $28^2 - x^3 = 7^3 + 225$
(a) 6 (b) 8 (c) 4
(d) 7 (e) 5

47. $298 - 13^2 - 2^3 = x \times 11$
(a) 51 (b) 41 (c) 21
(d) 11 (e) 31

48. $\sqrt[3]{729} + 3\frac{3}{5} \div x = \sqrt{16 \times 9}$
(a) 1 (b) 1.4 (c) 1.2
(d) 1.6 (e) 2

49. x% of 300 + $\sqrt{256}$ = 243 ÷ 3 + 7
(a) 18 (b) 24 (c) 16
(d) 28 (e) 32

50. $x \times 3 \div 8 = \sqrt[3]{512} \times \sqrt{12^2}$
(a) 256 (b) 512 (c) 64
(d) 128 (e) 320

51. $136 \div 2^2 \times x = 17\%$ of $500 \div 10$
(a) 1 (b) 0.5 (c) 0.25
(d) 0.125 (e) 1.25

52. $1836 \div x \div 9 = 12$
(a) 9 (b) 11 (c) 13
(d) 15 (e) 17

53. Ratio of present ages of two persons A and B is 3:2 and after four years ratio of their age (B:A) become 7:10. Then find the present age of B?
(a) 20 years (b) 18 years (c) 24 years
(d) 36 years (e) 30 years

54. The difference between Circumference of circle A and diameter is 90 cm . If Radius of Circle B is 7 cm less than circle A then find area of Circle B?
(a) 556 cm^2 (b) 616 cm^2 (c) 588 cm^2
(d) 532 cm^2 (e) 630 cm^2

55. There are 40 children in a class in which boys are 4 more than the girls. Average weight of all the students is 42.5 kg and the average weight of all the girls is 48 kg then find the average weight of all the boys.
(a) 39.5 kg (b) 38 kg (c) 40.5 kg
(d) 36.75 kg (e) 40.25 kg

Directions (56-60): In each question two equations numbered (I) and (II) are given. Student should solve both the equations and mark appropriate answer.
(a) If x=y or no relation can be established
(b) If x>y
(c) If x<y
(d) If x>=y
(e) If x<=y

56. **I.** $8x^2 + 6x + 1 = 0$ **II.** $3y^2 + 7y + 2 = 0$

57. **I.** $x^2 = 196$ **II.** $y^2 - 26y + 169 = 0$

58. **I.** $9x^2 - 12x + 4 = 0$ **II.** $8y^2 - 9y + 1 = 0$

59. **I.** $x^2 - 15x + 56 = 0$ **II.** $y = \sqrt[3]{512}$

60. **I.** $3x^2 + 10x + 8 = 0$ **II.** $2y^2 + 3y + 1 = 0$

61. A man invested 15% of his monthly income in LIC and remaining gave to his mother. Mother spend 10 % of it in household expenses and she had left with Rs 30,600 then find the salary of man ?
(a) Rs 37,500 (b) Rs 36,000 (c) Rs 38,000
(d) Rs 42,000 (e) Rs 40,000

62. If 7 marks are awarded to right answer and 4 marks are penalty for wrong answer. Then Prabhat's score was 263. If he attempted 58 questions then find number of correctly attempted questions?
(a) 45 (b) 42 (c) 48
(d) 40 (e) 50

63. In a city, 68% of population is literate in which ratio of male to female is 11:6. And ratio of illiterate male to female is 3: 1 . Find the ratio of literate female to illiterate female in that city.
(a) 3:2 (b) 2:1 (c) 3:1
(d) 4:1 (e) 5:2

64. Ratio of length to breadth of a rectangle is 4:3. If the area of that rectangle is 108 cm^2 and breadth of this rectangle is equal to the side of a square then find the area of that square.
(a) 49 cm^2 (b) 100 cm^2 (c) 64 cm^2
(d) 81 cm^2 (e) 121 cm^2

65. A is 1.5 times as efficient as that of B and C takes half time as compared to that of A. If A and B takes $2\frac{2}{5}$ days to complete half of the work then find the time taken by A and C together to complete the whole work?
(a) $2\frac{1}{3}$ days (b) $3\frac{1}{3}$ days (c) $1\frac{1}{3}$ days
(d) $1\frac{2}{3}$ days (e) $2\frac{2}{3}$ days

Directions (66-70): Given below table shows the number of cakes of five different types sold by a shopkeeper on four different days. Study the data and answer the questions that follow:

Days/Type of Cake	A	B	C	D	E
Saturday	25	28	35	50	38
Sunday	35	65	48	42	47
Monday	38	60	40	24	29
Tuesday	46	54	55	44	30

66. What is the ratio of no. of cakes of type B sold by the shopkeeper on Saturday and Monday together to the no. of cakes of type E sold by him on the same days?
(a) 72:53 (b) 88:67 (c) 98:73
(d) 92:71 (e) 90:67

67. What is average no. of cakes of type C sold by shopkeeper on Saturday, Sunday and Tuesday?
(a) 38 (b) 40 (c) 42
(d) 44 (e) 46

68. The no. of cakes of type D and E sold together on Tuesday is what percent of the no. of cakes of type A & B sold together on Sunday?
(a) 72% (b) 75% (c) 74%
(d) 78% (e) 80%

69. What is the difference between the total no. of cakes of all the given types sold by shopkeeper on Monday and the total no. of cakes of all the given types sold by shopkeeper on Tuesday?
(a) 38 (b) 44 (c) 42
(d) 40 (e) 45

70. If the no. of cakes of type F sold by the shopkeeper in given four days is 25% more than the no. of cakes sold of type D in all the given days, then find the no. of cakes sold of type F in all the given days.
(a) 164 (b) 160 (c) 180
(d) 200 (e) 240

ENGLISH LANGUAGE

Directions (71-76): Read the following passage and answer the questions that follow it. Some words are highlighted to help you answer some of the questions.

Conversations about the role of flexible working have shifted. It's no longer enough for companies to offer employees the option to either work from home or the office. Employees want to work from anywhere. Companies that want to attract and retain top talent, and ensure teams are highly productive, need to adapt their culture and technology to accommodate this shift in attitudes. And this is where the IT department can solidify its role as a valued contributor to the success of a company, by implementing technologies that enable secure and remote collaboration.

According to a recently commissioned Polycom survey, 24,000 respondents across 12 countries indicate that nearly two-thirds of today's global workforce take advantage of the anywhere working model. This is a significant shift since May of 2012 when only 14% of employees benefited from remote working. The survey results also provide insights into some of the concerns among companies in moving forward with the anywhere working model. Two significant concerns are a lack of trust and the perception that employees are not working as hard when they are not in the office. Also, among the 45-60-year-old age group, 59% worry that working anywhere will cause them to work longer hours. The fear of being always connected to work and overworking is a significant deterrent for this age group.

A good first step for companies to overcome the trust and perception concern is to ensure workers are measured by output and not by the hours they have worked, commonly referred to as 'presenteeism.' Countries like Brazil lead the pack here with 80% of employees adopting the anywhere working model, and 64% respondents use video to communicate several times a day. When respondents were asked how their companies could improve trust and perceptions with the anywhere working model, the most popular recommendations were to: Equip workers with technology that is easy to use and which connects them to their colleagues; Ensure the same policies are applied to everyone in the business, regardless of seniority or their situation; and Provide guidelines on how to manage working from anywhere.

91% of those surveyed agreed that technology is a key factor in improving relationships and **fostering** better teamwork. This suggests that investing in the right technologies, in particular video collaboration, to get the most out of individuals and teams can help solve the lack of trust and perception concerns. And this is where the IT department can become a difference maker as they can implement technologies, such as video conferencing, to ensure colleagues can seamlessly collaborate wherever they are.

71. What is the shift in attitude of employees as discussed in the passage?
(I) They want to work in office.
(II) They want to work from home.
(III) They want to work from anywhere.
(a) Only (I)
(b) Both (II) & (III)
(c) Only (III)
(d) Only (II)
(e) None of (I), (II) & (III)

72. How could companies accommodate the recent shift in attitudes of employees as discussed in the passage?
(a) By offering work from home option to employees
(b) By enabling secure and remote collaboration
(c) By increasing the salaries of employees
(d) Options (a) & (b)
(e) None of the above

73. Which of the followings mention(s) the concern of the companies to accommodate the latest preference of employees for working styles?
(a) Lack of trust for employees;
(b) Perception that employees will not work hard anywhere apart from office;
(c) Working anywhere would make employees to work longer hours;
(d) Options (b) & (c)
(e) Options (a) & (b)

74. How could companies overcome their concerns for the latest preferences of employees for style of working?
(a) By not offering work from home model
(b) By measuring employees for the output, they generate and not by the hours they have worked
(c) By offering work from anywhere model
(d) By allowing only those who are interested to work from anywhere.
(e) None of the above

75. Which of the following opinions as expressed in the survey about solving the trust and perception concerns of the companies in accommodating the latest preference of employees for style of work has received more than 91%?
(a) Investing in technology
(b) Providing guidelines on how to manage working from anywhere
(c) Ensuring the same policies are applied to everyone regardless of seniority
(d) Options (a) & (c)
(e) None of the above

76. Which of the following options has a meaning which is SIMILAR to the word 'fostering'?
(a) asserting (b) focusing (c) collaborating
(d) encouraging (e) admitting

Directions (77-81): Rearrange the following five sentences (A), (B), (C), (D) and (E) in the proper sequence to form a meaningful paragraph and then answer the questions given below.

(A) Crucially, this loss of sheen is reflected in the account books of the sport's controversial administrator, among the richest in the world.
(B) The total income that was distributed by BCCI among players is reduced because of lower income from media rights.
(C) Television viewership for the game has dropped 40% to a weekly 61 gross rating points (GRPs).
(D) A Board of Control for Cricket in India official said, however, that this was because India wasn't playing enough at home.
(E) Cricket seems to be losing its crowd-pulling power.

77. Which of the followings is the FOURTH sentence of the final sequence?
(a) A (b) D (c) E
(d) B (e) C

78. Which of the followings is the FIRST sentence of the final sequence?
(a) E (b) C (c) D
(d) A (e) B

79. Which of the followings is the SECOND sentence of the final sequence?
(a) E (b) A (c) C
(d) D (e) B

80. Which of the followings is the THIRD sentence of the final sequence?
(a) E (b) A (c) D
(d) C (e) B

81. Which of the followings is the FIFTH sentence of the final sequence?
(a) C (b) A (c) E
(d) D (e) B

Directions (82-85): In the following questions, a sentence is given consisting four highlighted words. Choose the option reflecting the word which is either misspelt or grammatically incorrect. If all the highlighted words are correct, choose option (e) i.e. "no error" as your answer choice.

82. **Making** the **request** for a non-smoking room seemed **resonable** for everyone since the woman was **allergic** to smoke.
(a) Making (b) Request (c) Resonable
(d) Allergic (e) No error

83. When we are **involved** in large-scale projects, we must make **judgements** on an **individual basis** about whether they are good or bad.
(a) involved (b) judgements (c) individual
(d) basis (e) No error

84. Several **expriments** were tried, to **determine** positively **whether** or not she had any **perception** of sound.
(a) expriments (b) determine (c) whether
(d) perception (e) No error

85. When the man gave the **terrific** persuasive speech at the **conference**, the observers **applaud** with gusto by **putting** their hands together.
(a) terrific (b) conference (c) applaud
(d) putting (e) No error

Directions (86-90): In the following questions two columns are given containing three sentences/phrases each. In first column, sentences/phrases are A, B and C and in the second column the sentences/phrases are D, E and F. A sentence/phrase from the first column may or may not connect with another sentence/phrase from the second column to make a grammatically and contextually correct sentence. Each question has five options which display the sequence(s) in which the sentences/phrases can be joined to form a grammatically and contextually correct sentence. Choose the correct combination of parts that make a meaningful sentence.

86. **COLUMN I**
(A) There is emerging international recognition
(B) It can serve as the driving force to restore hope
(C) The earnest determination distilled in these words is the spirit we all need
COLUMN II
(D) and create societies where all can live with hope and dignity.
(E) our work makes us feel productive and empowered.
(F) that women's participation is key to effective climate action.
(a) C-F, A-D and A-E
(b) B-E
(c) A-F
(d) A-D and C-E
(e) A-F and B-E

87. **COLUMN I**
(A) Over time, there are changes that take place
(B) In the case of primary succession,
(C) In other cases, a pre-existing group of species is replaced by a new group of species,
COLUMN II
(D) where they house an array of species.
(E) that ecological communities move from possessing very little species diversity
(F) in the composition of species that constitute an ecological community.

(a) C-E, A-D and A-F
(b) B-D
(c) A-F
(d) B-E and C-D
(e) B-D

88. **Column (1)**
(A) The increase in MSP for rabi crops comes
(B) There are notified crops
(C) For big companies, there are instances
Column (2)
(D) The government said in a release.
(E) Just ahead of the RBI monetary policy announcement.
(F) Of even the infrastructure getting damaged.
(a) C-F (b) C-E and B-F (c) A-E
(d) C-F and A-E (e) B-F, B-E and A-D

89. **Column (1)**
(A) India will be the third largest aviation
(B) The biggest contribution in
(C) Firstly, we are seeing an/a
Column (2)
(D) market globally a year sooner.
(E) as the world's largest aviation
(F) restrictive protectionist measures
(a) C-D, A-F and B-D
(b) B-F
(c) A-D
(d) C-E and B-D
(e) B-E

90. **COLUMN I**
(A) Researchers are only beginning to understand the power
(B) As our understanding grows, we will have the potential
(C) The burden of gene editing
COLUMN II
(D) cannot be borne by science alone.
(E) to edit out genes that cause fatal diseases.
(F) would not be passed down the family tree.
(a) A-D, B-E and B-D
(b) B-E and C-D
(c) A-F
(d) B-F and C-E
(e) C-E

Directions (91-95): Given below are sentences consisting a blank in each. Identify the most suitable alternative among the five given that fits into the blank to make the sentence logical and meaningful.

91. In _____ to picking up milk from the grocery store, we also need to get some bread, because my cousin ate all of it this past week.
(a) further (b) addition (c) computation
(d) aftermath (e) besides

92. He _____ on things being done in the most efficient way and he usually does them that way himself.
(a) requesting (b) conserves (c) urge
(d) insists (e) discourages

93. If the quality of your product meets with our customer's approval, we will place _____ orders.
(a) interrupted (b) reduced (c) regular
(d) choice (e) conditional

94. Tom seems to be unwilling to believe that Mary was the one who _____ his credit cards.
(a) stole (b) run (c) accept
(d) delivery (e) checking

95. The Circular will guide the regional investment _____ and budgeting processes for FY 2020 Budget.
(a) programming
(b) scheduled
(c) arrange
(d) planned
(e) records

Direction (96-100): The following questions consist of a sentence with a highlighted phrase which may or may not be grammatically or contextually correct. Choose the most suitable option that will replace the incorrect highlighted phrase to form a grammatically correct and meaningful sentence. If the given highlighted phrase is correct, choose option (e) i.e. "no replacement required" as your answer choice.

96. India has suffered from terrorism. So has Pakistan. And **it turns out**, now the first world too is not immune.
(a) turning out to
(b) it turns to
(c) it turned out to be
(d) it turning out
(e) No replacement required

97. Ravi **would attempt to** open the lock with all his might when his spectacles slipped off and fell down
(a) hardly have attempted to
(b) attempted to
(c) should to
(d) could have attempted to
(e) No replacement required

98. Any step that the Prime Minister takes to remove violence in the country **will be appreciate**.
(a) will appreciated
(b) will have appreciated
(c) was appreciating
(d) will be appreciated
(e) were appreciating

99. If this is freedom of speech, then it **must been curtailed** immediately.
(a) have being curtailing
(b) must be curtailed
(c) must have been curtailed
(d) have been curtailed
(e) No correction required

100. When the police started asking questions, the suspect **clammed up.**
(a) camped down
(b) clamped up
(c) clam out
(d) clamed off
(e) No Correction Required

Solutions

REASONING ABILITY

Directions (1- 5):

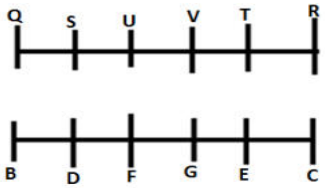
Days	Persons
Mon	F
Tue	B
Wed	E
Thu	C
Fri	A
Sat	D
Sun	G

1. (d); 2. (b); 3. (a);
4. (d); 5. (a);

Directions (6-8):
B > E > A > F > C > D

6. (b); 7. (c); 8. (d);

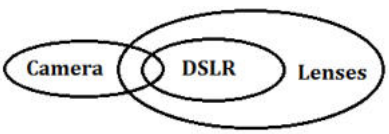
Directions (9-13):



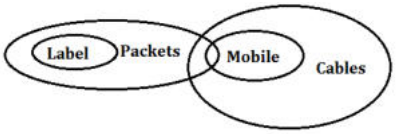
9. (c); 10. (b); 11. (d);
12. (b); 13. (e);

Directions (14-16):

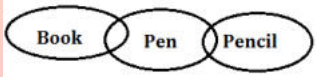
14. (b);



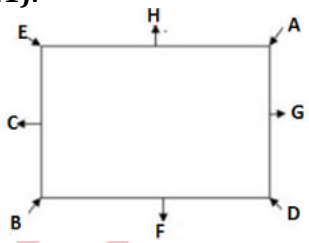
15. (d);



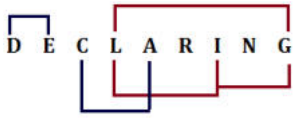
16. (d);



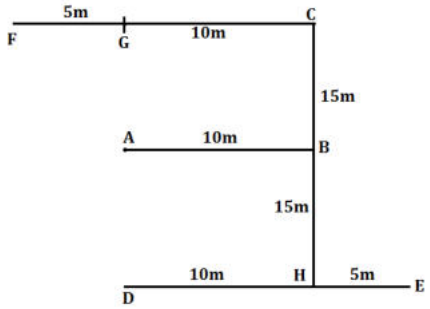
Direction (17-21):



17. (b); 18. (a); 19. (d);
20. (a); 21. (d);
22. (d);



Directions (23-25):



23. (c); 24. (a); 25. (d);

Directions (26-30):

26. (c); TAP NOT MAT PQR STB
TAP STB PQR NOT MAT

27. (c); TAP NOT MAT PQR STB
Hence, there are 18 letters between A and T.

28. (d); TAP NOT MAT PQR STB
TBO NPS MBS PRQ SUA

29. (d); TAP NOT MAT PQR STB
PAT TON TAM RQP BTS

30. (d);

Directions (31-35):

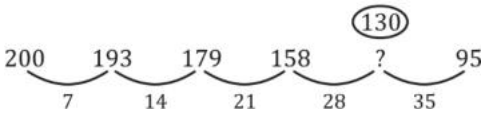
Person	CITY
A	Delhi
B	Ahmedabad
C	Chennai
D	Pune
E	Kolkata
F	Lucknow
G	Mumbai

31. (e); **32. (c);** **33. (d);**

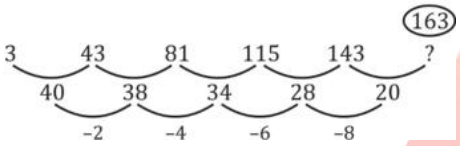
34. (d); **35. (a);**

QUANTITATIVE APTITUDE

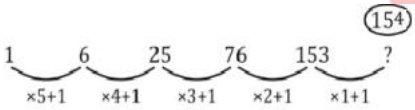
36. (d);



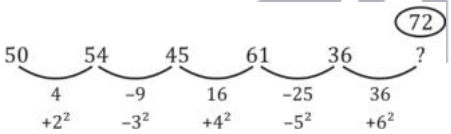
37. (a);



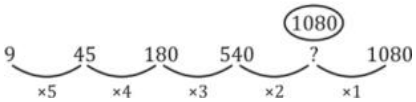
38. (b);



39. (b);



40. (c);



41. (b); Let the speed of boat in still water be x km/hr
ATQ
$x + 3 + x - 3 = 36$
$x = 18$
Required time=$\frac{52.5}{21} = 2.5$ hr

42. (d); Let that sum be Rs 'p' and rate of interest be 'r'% per annum
Amount= Rs 1.6p
SI= Rs 0.6p
ATQ
$0.6p = \frac{p \times r \times 5}{100} \Rightarrow r = 12\%$

43. (b); $x^2 + (81 + 34) \div 5 = 39$
$x^2 + \frac{115}{5} = 39$
$x^2 = 39 - 23 = 16$
$x = 4$

44. (c); $\frac{6 \times 16 \times 5}{3} - x^2 = 96$
$160 - 96 = x^2$
$64 = x^2$
$8 = x$

45. (e); $\sqrt{293 + x} = 18$
Or, 293 + x = 324
Or, x = 324 – 293 = 31

46. (a); $784 - x^2 = 343 + 225$
$x^3 = 784 - 568 = 216$
$x = 6$

47. (d); $298 - 169 - 8 = x \times 11$
$121 = x \times 11$
$x = 11$

48. (c); $9 + \frac{18}{5x} = 12 \Rightarrow \frac{18}{5x} = 3 \Rightarrow x = 1.2$

49. (b); $x \times 3 + 16 = 81 + 7$
$\Rightarrow 3x = 72 \Rightarrow x = 24$

50. (a); $\frac{3x}{8} = 8 \times 12$
$\Rightarrow 3x = 64 \times 12 \Rightarrow x = 256$

51. (c); $\frac{136}{4} \times x = \frac{85}{10} \Rightarrow x = \frac{85 \times 4}{10 \times 136} = \frac{1}{4} = 0.25$

52. (e); $\frac{1836}{9x} = 12$
$\Rightarrow x = \frac{1836}{12 \times 9} \Rightarrow x = 17$

53. (c); Let the present age of A and B be 3x and 2x years respectively
ATQ
$\frac{3x+4}{2x+4} = \frac{10}{7} \Rightarrow x = 12$
Present age of B=24 yr

54. (b); Let radius of circle A be r cm
ATQ
$2\pi r - 2r = 90$
$r = 21$ cm
Radius of circle B=14 cm
Area of circle B= 616 cm^2

55. (b); Let the number of girls be x
Then, boys= x+4
ATQ
x + 4 + x = 40
x = 18
total weight of all students= $40\times 42.5 = 1700$kg
total weight of girls=$18\times 48 = 864$ kg
weight of all boys = 1700 – 864 = 836 kg
average weight of all boys = $\frac{836}{22}$ = 38 kg

56. (a); **I.** $8x^2+6x+1=0$
$\Rightarrow 8x^2+4x+2x+1=0$
$\Rightarrow (4x+1)(2x+1)=0$
$x=-\frac{1}{4},-\frac{1}{2}$
II. $3y^2+7y+2=0$
$\Rightarrow y=-2,-\frac{1}{3}$
No relation

57. (a); **I.** $x^2=196$
$X=-14,14$
II. $y^2-26y+169=0$
$\Rightarrow y=13$
No relation

58. (a); **I.** $9x^2-12x+4=0$
$\Rightarrow 9x^2-6x-6x+4=0$
$x=\frac{2}{3},\frac{2}{3}$
II. $8y^2-9y+1=0$
$\Rightarrow y=1,\frac{1}{8}$
No relation

59. (e); **I.** $x^2-15x+56=0$
x = 8,7
II. $y=\sqrt[3]{512}$
$\Rightarrow y=8$
y > = x

60. (c); **I.** $3x^2+10x+8=0$
$x=-2,-\frac{4}{3}$
II. $2y^2+3y+1=0$
$\Rightarrow y=-1,-\frac{1}{2}$
y>x

61. (e); Let the salary of man be Rs x
Amount given to mother=0.85x
ATQ
$0.85x\times 0.90 = 30{,}600$
x = Rs 40,000

62. (a); Let number of correct questions be x
Then, incorrect question=(58-x)
ATQ
$x\times 7-(58-x)\times 4 = 263$
$x = 45$

63. (c); Let the total population of that city be 100x
Then literate population= 68x
Literate male=$68x\times\frac{11}{17} = 44x$
Literate female=24x
Illiterate population= 32x
Illiterate female=$32x\times\frac{1}{4} = 8x$
Required ratio=$\frac{24x}{8x}$=3:1

64. (d); Let the length and breadth of that rectangle be 4x and 3x cm respectively
ATQ
$4x\times 3x = 108$
$x = 3$ cm
Breadth=9 cm
Area of square= 81 cm^2

65. (e); Let the efficiency of A and B be 3x and 2x unit/day respectively
Efficiency of C=6x units/day
Total work=$\frac{12}{5}\times 2\times 5x = 24x$ units
Required time=$\frac{24x}{9} = 2\frac{2}{3}$ days

66. (b); Required ratio = $\frac{28+60}{38+29} = \frac{88}{67}$

67. (e); Required average = $\frac{35+48+55}{3} = \frac{138}{3} = 46$

68. (c); Required percentage
$= \frac{(44+30)}{(35+65)}\times 100 = \frac{74}{100}\times 100 = 74\%$

69. (a); Total cakes sold on Monday = 38 + 60 + 40 + 24 + 29 = 191
Total cakes sold on Tuesday = 46 + 54 + 55 + 44 + 30 = 229
Difference = 229 – 191 = 38

70. (d); No. of cakes of type F = $\frac{125}{100}\times(50+42+24+44)$
$= \frac{5}{4}\times 160 = 200$

ENGLISH LANGUAGE

71. (c); The answer to the question can be derived from the third and fourth sentences of the first paragraph which is 'Employees want to work from anywhere. Companies that want to attract and retain top talent, and ensure teams are highly productive, need to adapt their culture and technology to accommodate this shift in attitudes'.
Hence, the statement (III) or option (c) is the correct answer.

72. (b); The recent shift in attitudes of employees is that they want to work from anywhere. Companies can accommodate this shift in attitude by enabling secure and remote collaboration so that work from anywhere could be enabled. The answer can also be inferred from the first paragraph, especially the last sentence of the first paragraph.
Hence, option (b) is the correct answer.

73. (e); The latest preference of employees for working styles is to work from anywhere. The answer to the question can be derived from the last third sentence of the second paragraph: 'The survey results also provide insights into some of the concerns among companies in moving forward with the anywhere working model. Two significant concerns are a lack of trust and the perception that employees are not working as hard when they are not in the office'.
Hence, option (e) is the correct answer.

74. (b); The latest preference of employees for style of working, as discussed in the passage, is working from anywhere. The companies can overcome their concerns for the working from anywhere model through, as mentioned in the first sentence of the third paragraph, 'presenteeism'. Meaning that the workers are measured by output and not by the hours they have worked.
Hence, option (b) is the correct answer.

75. (a); The answer to the question can be derived from the first sentence of the fourth paragraph '91% of those surveyed agreed that technology is a key factor in improving relationships and fostering better teamwork'. From the highlighted sentence, it could be inferred that the 91% of those surveyed agreed that investing in technology would solve the lack of trust and perception concerns.
Hence, option (a) is the correct answer.

76. (d); fostering [foster, verb] means 'encourage the development of (something, especially something desirable);
asserting [assert, verb] means 'state a fact or belief confidently and forcefully';
focusing [focus, verb] means 'adapt to the prevailing level of light and become able to see clearly';
collaborating [collaborate, verb] means 'work jointly on an activity or project';
encouraging [encourage, verb] means 'give support, confidence, or hope to (someone)';
admitting [admit, verb] means 'confess to be true or to be the case';
From above, it could be understood that the word 'encourage' has the meaning which is SIMILAR to the meaning of the work 'foster'.
Hence, option (d) is the correct answer.

77. (d); The final sequence we get is ECABD.
Sentence B is the FOURTH sentence of the final sequence.
The option (d) is the correct answer.
The sentence (E) introduces the theme of the paragraph which is discussing dying of cricket in India. So, the sentence (E) should be the first sentence of the paragraph.
Though, both sentences (A) and (B) take the information presented in the sentence (C) forward, it is more coherent for the sentence (A) to follow the sentence (C). And it is more coherent for the sentence (B) to follow the sentence (A). The sentence (D) is an appropriate concluding sentence as it provides the reason for the downfall of the cricket.
So, the final sequence we get is ECABD and the option (d) is the correct answer.

78. (a); The final sequence we get is ECABD.
Sentence E is the FIRST sentence of the final sequence.
The option (a) is the correct answer.
The sentence (E) introduces the theme of the paragraph which is discussing dying of cricket in India. So, the sentence (E) should be the first sentence of the paragraph.
Though, both sentences (A) and (B) take the information presented in the sentence (C) forward, it is more coherent for the sentence (A) to follow the sentence (C). And it is more coherent for the sentence (B) to follow the sentence (A). The sentence (D) is an appropriate concluding sentence as it provides the reason for the downfall of the cricket.
So, the final sequence we get is ECABD and the option (a) is the correct answer.

79. (c); The final sequence we get is ECABD.
Sentence C is the SECOND sentence of the final sequence.
The option (c) is the correct answer.
The sentence (E) introduces the theme of the paragraph which is discussing dying of cricket in India. So, the sentence (E) should be the first sentence of the paragraph.
Though, both sentences (A) and (B) take the information presented in the sentence (C) forward, it is more coherent for the sentence (A) to follow the sentence (C). And it is more coherent for the sentence (B) to follow the sentence (A). The sentence (D) is an appropriate concluding sentence as it provides the reason for the downfall of the cricket.
So, the final sequence we get is ECABD and the option (c) is the correct answer.

80. (b); The final sequence we get is ECABD.
Sentence A is the THIRD sentence of the final sequence.
The option (b) is the correct answer.
The sentence (E) introduces the theme of the paragraph which is discussing dying of cricket in India. So, the sentence (E) should be the first sentence of the paragraph.
Though, both sentences (A) and (B) take the information presented in the sentence (C) forward, it is more coherent for the sentence (A) to follow the sentence (C). And it is more coherent for the sentence (B) to follow the sentence (A). The sentence (D) is an appropriate concluding sentence as it provides the reason for the downfall of the cricket.
So, the final sequence we get is ECABD and the option (b) is the correct answer.

81. (d); The final sequence we get is ECABD.
Sentence D is the FIFTH sentence of the final sequence.
The option (d) is the correct answer.
The sentence (E) introduces the theme of the paragraph which is discussing dying of cricket in India. So, the sentence (E) should be the first sentence of the paragraph.
Though, both sentences (A) and (B) take the information presented in the sentence (C) forward, it is more coherent for the sentence (A) to follow the sentence (C). And it is more coherent for the sentence (B) to follow the sentence (A). The sentence (D) is an appropriate concluding sentence as it provides the reason for the downfall of the cricket.
So, the final sequence we get is ECABD and the option (d) is the correct answer.

82. (c); Among the highlighted words the misspelt word is "resonable". However, the precise spelling of the word is "REASONABLE" and it means having sound judgment; fair and sensible.. All the other words have been spelt correctly and are in appropriate grammatical syntax. Hence, option (c) is the most suitable answer choice.

83. (b); Among the highlighted words the misspelt word is "judgements". However, the precise spelling of the word is "JUDGMENTS" and it means the ability to make considered decisions or come to sensible conclusions. All the other words have been spelt correctly and are in appropriate grammatical syntax. Hence, option (b) is the most suitable answer choice.

84. (a); Among the highlighted words the misspelt word is "expriments". However, the precise spelling of the word is "EXPERIMENTS" and it means perform a scientific procedure, especially in a laboratory, to determine something. All the other words have been spelt correctly and are in appropriate grammatical syntax. Hence, option (a) is the most suitable answer choice.

85. (e); All the highlighted words of the sentence are grammatically correct and contextually meaningful with precise spellings. Since there is no error option (e) becomes the most suitable answer choice.

86. (c); Combination A-F forms grammatically viable and contextually meaningful sentence as the relevant phrases are of similar context and in appropriate grammatical syntax. The sentence thus formed is, "There is emerging international recognition that women's participation is key to effective climate action".

87. (c); Combination A-F forms grammatically viable and contextually meaningful sentence as the relevant phrases are of similar context and in appropriate grammatical syntax. The sentence thus formed is,
"Over time, there are changes that take place in the composition of species that constitute an ecological community."

88. (d); For big companies, there are instances of even the infrastructure getting damaged, Sentence (C) and (F) makes proper combination as a sentence. The increase in MSP for rabi crops comes just ahead of the RBI monetary policy announcement, (A) and (E) makes the perfect match as in sentence.

89. (c); Only sentence (A) and (D) makes a perfect match as a sentence, India will be the third largest aviation market globally a year sooner.

90. (b); Combination B-E and C-D successfully form grammatically viable and contextually meaningful sentence as the relevant phrases are of similar context and in appropriate grammatical syntax.

91. (b); The most appropriate word to fill the blank is "addition" as "in addition to" is phrase which is used for saying that something extra exists or is happening together with the thing that you are talking about. All the other words fail to form a comprehensive sentence. Hence, option (b) is the most suitable answer choice.
Computation means the action of mathematical calculation.
Aftermath means the consequences or after-effects of a significant unpleasant event.

92. (d); The most appropriate word to fill the blank is "insists". "insists" is a verb which means persist in (doing something). Some of the other words however may seem contextually meaningful yet they are grammatically incorrect. Hence, option (d) is the most suitable answer choice.
Conserves means protect (something, especially something of environmental or cultural importance) from harm or destruction.
Urge means try earnestly or persistently to persuade (someone) to do something.

93. (c); The most appropriate word to fill the blank is "regular". "regular" means recurring at uniform intervals. Since the sentence is describing about the matching of quality of the product with the customer's need, the next part of the sentence should complement the earlier part. Therefore all the other words become contextually incorrect. Hence, option (c) is the most appropriate answer choice.
Interrupted means stop the continuous progress of (an activity or process).
Reduced means make smaller or less in amount, degree, or size.
Conditional means subject to one or more conditions or requirements being met

94. (a); The most appropriate word to fill the blank is "stole". "Stole" means take (another person's property) without permission or legal right and without intending to return it. All the other words are grammatically and contextually correct.

95. (a); The most appropriate word to fill the blank is "programming" as it means the process of scheduling something. All the other words become contextually incorrect. Hence, option (c) is the most appropriate answer choice.
Schedule means a plan for carrying out a process or procedure, giving lists of intended events and times.
Arrange means put (things) in a neat, attractive, or required order.

96. (e); The sentence is grammatically correct.

97. (b); In place of 'would attempt', 'attempted' will be used because in simple past tense subject + second form of the verb is used.

98. (d); Instead of 'appreciate' in the highlighted part, '**appreciated**' would be used. In passive voice, '**to be [is/are/am/was/were/be//being/been] + V3** form is always used.
Hence, the option (d) is the correct answer.

99. (b); **Curtail** means reduce in extent or quantity; impose a restriction on.

100. (e); **Clam up** means to refuse to speak.

Mock 25

IBPS Clerk Prelims 2017

REASONING ABILITY

Directions (1-5): Study the following information carefully and answer the questions given below:
There are eight persons namely S, T, U, V, W, X, Y and Z lives on eight different floors from one to eight. Ground floor is number 1 and top floor is number eight but not necessarily in the same order.
X lives on odd number floor but does not live on 3rd floor. Z lives immediate below X. More than two person lives between Z and Y. There are six person living between S and Y. V lives immediate above W but live below T. U does not live above X. W does not live immediate above Y.

1. Who lives on floor number five?
(a) U (b) S (c) Z
(d) T (e) None of these

2. How many persons live between W and X?
(a) One (b)Three (c) Five
(d)Two (e)None of these

3. Who lives immediate above V?
(a)Z (b)T (c)Y
(d)W (e)None of these

4. Four of the following five are alike in a certain way based on the given arrangement and thus form a group. Which is the one that does not belong to that group?
(a)Y (b) V (c)T
(d)X (e) W

5. Who lives on 2nd floor?
(a)X (b)S (c)U
(d)Z (e)None of these

Directions (6-8): In each of the questions below are given three statements followed by two conclusions numbered I and II. You have to take the given statements to be true even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts. Give Answer-
(a) If only Conclusions I follows
(b) If only Conclusions II follows
(c) If either Conclusions I or Conclusion II follows
(d) If neither Conclusion I nor Conclusion II follows
(e) If both Conclusion I and II follows

6. **Statement**-Some Dares are Dream.
All Dreams are Real.
No Real is Fake.
Conclusion:-
I. Some Dreams are Fake.
II. All dream is not fake.

7. **Statement-**No Rain is Game.
Some Games are Chain.
No Chain is Lane.
Conclusions:
I. Some Chains are not Rain.
II. Some Games are Lane.

8. **Statement-**Some Movie are Ticket.
No Ticket is Popcorn.
Some Popcorn is Burger.
Conclusions:
I. Some Movies are Burger.
II. Some Burgers are not Movie.

Directions (9-13): Study the following information carefully and answer the questions given below:
Eight friends A, B, C, D, P, Q, R and S are sitting in a straight line (but not necessarily in the same order). Some of them are facing south while some are facing north.(Note: Facing the same direction means. If one is facing north then the other also faces north and vice versa. Facing opposite directions means. If one is facing North then the other faces south and Vice versa).
Q sits at one of the extreme ends of the line. C sits third to the left of Q. B, is not an immediate neighbour of Q. P, sits third to the right of C. A faces north. D sits to the immediate right of P. D does not sits at any of the extreme end of the line. Only one person sits between R and B. P sits second to the left of R. S sits second to the right of D. Both the immediate neighbour of P faces the same direction to each other. Both the immediate neighbour of C faces the opposite direction to each other. S faces the same direction as D and A faces the same direction as R.

9. How many persons sits between D and A?
(a)One (b)Non (c)Three
(d)Two (e) None of these

10. Who among the following pair sits at extreme ends?
(a)S, Q (b)D, Q (c)Q, R
(d)S, R (e) None of these

11. Who sits third to the left of D?
(a)R (b)B (c)Q
(d)C (e) None of these

12. Who sits immediate right of B?
(a)A (b)C (c) R
(d)S (e) None of these

13. Four of the following five are alike in a certain way based on the given seating arrangement and thus form a group. Which is the one that does not belong to that group?
(a) A (b) C (c) S
(d) B (e) D

Directions (14-16): In these questions, relationship between different elements is shown in the statements. These statements are followed by two conclusions:
(a) If only conclusion I follows.
(b) If only conclusion II follows.
(c) If either conclusion I or II follows.
(d) If neither conclusion I nor II follows.
(e) If both conclusion I and II follow.

14. Statements: Z>W>V=K<L<I
Conclusion: **I.** W>K **II.** I>K

15. Statements: Q>B, K<E<B, J≥E, R<Q
Conclusion: **I.** Q>K **II.** Q=E

16. Statement: E = F < G < H; G ≥ I
Conclusions: I. H > I **II.** E > I

Directions (17-21): Study the following alphabetical sequence and answer the questions following it.
A B B C D E F E I B C A F E C B B A C A O B N U V W

17. How many C's are there in the alphabetical series which are immediately preceded by a vowel and immediate followed by consonant?
(a) One (b) Two
(c) Three (d) More than three
(e) None of these

18. If all the vowels are dropped from the series, then which alphabet will be eighth from the left end?
(a)C (b)B (c) N
(d)F (e) None of these

19. How many Vowels are there in the alphabetical series which are immediately preceded by a consonant?
(a) One (b) Two
(c) Four (d) More than Five
(e)N*one*

20. If the position of the 1st and the 14th alphabets, the 2nd and the 15th alphabets, and so on up to the 13th and the 26th alphabets, are interchanged, Then which alphabet will be 7th to the right of 10th alphabet from the right end?
(a) A (b) C (c) N
(d)B (e) None of these

21. How many total vowels are there in the alphabetical series?
(a) Five (b)Ten (c)Three
(d) Nine (e) None of these

Direction(22-26): Study the following information carefully and answer the questions given below:
There are eight notes of different denominations i.e. 1, 5, 20, 50,100, 200, 500, 2000 rupees which are arranged in a circular arrangement facing towards the centre not necessarily in the same order. 50 rupees note is arranged second to the right of 200 rupees note. Odd denominations note will not be immediate neighbour of 200 and 50 rupees note. There will be less than 100 rupee denomination note to the immediate left and immediate right of 100 rupees note except 1 rupee note. 100 rupee note is second to the left of 5 rupees note. 2000 rupees note is second to the left 100 rupees note.

22. Which rupee note will be arranged to the immediate left of 50 rupees note?
(a) 100 (b) 2000 (c) 500
(d) 5 (e) None of these

23. Which rupee note will be arranged to the third to the right of 5 rupees note?
(a) 2000 (b) 100 (c) 200
(d) 20 (e) None of these

24. What will be the sum of note which is immediate left of 50 rupees note and immediate right of 500 rupees note?
(a) 2100 (b) 550 (c) 700
(d) 2200 (e) None of these

25. Which denomination note are between 1 and 100 rupees note, when counted clockwise from 1 rupee note?
(a) 5 and 20
(b) 50 and 100
(c) 200 and 2000
(d) 1 and 500
(e) None of these

26. Which rupee note will be arranged to the third to the right of 2000 rupees note?
(a) 2000 (b) 100 (c) 200
(d) 20 (e) None of these

Directions (27-31): These questions are based on the following five numbers.
834 427 563 649 975

27. If all the digits of numbers are arranged in ascending order within the number, then which of the following is lowest number?
(a) 975 (b) 649 (c) 834
(d) 563 (e) None of these

28. If 1st digit of highest number is divided by 2nd digit of 2nd highest number, then what will be the resultant?
(a) 2 (b) 3 (c) 4
(d) 5 (e) None of these

29. If 2 is subtracted from the every even digit and 1 is subtracted from every odd digit number of each number, which number among them will be lowest number?
(a) 834 (b) 427 (c) 563
(d) 649 (e) None of these

30. What is addition of 3rd digit of highest number and 2nd digit of lowest number?
(a) 7 (b) 6 (c) 4
(d) 3 (e) None of these

31. If 1st digit of 2nd highest number is divided by 1st digit of lowest number, then what will be the resultant?
(a) 5 (b) 3 (c) 2
(d) 4 (e) None of these

32. If 1 is subtracted from each even number and 2 is subtracted to each odd number in the number **5827936,** then how many digits will appear twice in the new number thus formed?
(a) Only 7 (b) Only 5 and 7
(c) 1, 5 and 7 (d) 4, 5 and 9
(e) None of these

33. How many letter will be remain at the same position in the word '**SURFACE**' when they are arranged in the alphabetical order from left to right?
(a)four (b)Three (c)One
(d)Two (e)None of these

34. There are five person i.e. P, Q, R, S and T. If Q is taller than R and S but smaller than T. S is smaller than T, who is not the tallest. Then who is the tallest person among all?
(a)T (b)Q (c) S
(d) P (e)None of these

35. How many pairs of letters are there in the word "**SENATOR**" which have as many letters between them in the word as in alphabetical series?
(a) None (b) One (c) Two
(d) Three (e) Four

QUANTITATIVE APTITUDE

36. Ratio of speed of boat in down stream and speed of stream is 9:1, if speed of current is 3 km per hr, then find distance travelled(in km) upstream in 5 hours.
(a) 105 (b) 110 (c) 120
(d) 90 (e) 95

37. Sum of 4 consecutive even numbers are greater than three consecutive odd numbers by 81. If sum of least odd and least even number is 59, then find the sum of largest odd and largest even numbers.
(a) 69 (b) 71 (c) 73
(d) 67 (e) 79

38. Two different amounts are invested in two schemes. In scheme A, amount X is invested at 8 % per annum and in scheme B amount (X+1400) is invested at 12% per annum.After 2 years difference between interests obtained from both schemes is 880, then find value of X?
(a) 7200 (b) 5500 (c)6800
(d) 7300 (e) 7000

Directions (39-43): Given below is the table that shows the number of books sold from five stores on five days. Study the table carefully to answer the question.

Stores	Sunday	Monday	Tuesday	Wednesday	Thursday
A	77	80	49	93	58
B	89	57	55	85	54
C	56	36	82	90	40
D	68	74	78	70	95
E	82	65	90	86	84

39. What is the ratio of total number of books sold from store D on Sunday, Monday and Tuesday together to total books sold from store E on Tuesday, Wednesday and Thursday together.
(a) 13 : 11 (b) 11 : 15 (c)11:13
(d) 13 : 15 (e) 11 : 17

40. Number of books sold on Friday from stores C and D increased by 15% and 20% respectively as compared to that sold on previous day. What number of books the stores C & D sold on Friday?
(a) 162 (b) 158 (c) 150
(d) 160 (e) 168

41. Total numbers of books sold from store B on Tuesday and Wednesday together are what percent more or less than total books sold from stores C & D together on Monday?
(a) $27\frac{3}{13}\%$ (b) $27\frac{3}{11}\%$ (c)$25\frac{2}{11}\%$
(d) $24\frac{3}{11}\%$ (e) None of these

42. What is the average number of books sold from stores B on Sunday, C on Tuesday and E on Thursday ?
(a) 82 (b) 80 (c) 88
(d) 75 (e) 85

43. Find the difference in total number of books sold from stores C and E together on Tuesday and From store B on Monday and Thursday together?
(a) 61 (b) 65 (c) 59
(d) 60 (e) 63

Directions (44-48): What should come in place of the question mark(?) in following no. series?

44. 255, 230, 250, 235, 245, ?
(a) 245 (b) 240 (c) 225
(d) 260 (e) 265

45. 5, 3.5, 5, ?, 21.5, 56.75
(a) 7.5 (b) 8.5 (c) 9.5
(d) 10.5 (e) 9

46. 8, 4, 4, 8, 32, ?
(a) 512 (b) 128 (c) 248
(d) 256 (e) 232

47. 129, 128, 124, 115, ?, 74
(a) 99 (b) 98 (c) 101
(d) 97 (e) 103

48. 0.5, 1.5, 5, 18, 76, ?
(a) 380 (b) 385 (c) 390
(d) 375 (e) 395

49. Average age of A and B two years ago was 26 years. If age of A five years hence will be 40 years and B is 5 years younger than C. find difference bestween age of A and C?
(a) 8 years (b) 10 years
(c)9 years (d) 12 years (e) 6 years

50. Average of X, Y, Z is 24, X:Y = 2:3, X+Y = 60, then find X-Z=?
(a) 16 (b) 14 (c) 8
(d)10 (e) 12

51. Cost price of two articles is same. Shopkeeper got profit of 40% on first article, if selling price of second article is 25% less than selling price of first article, then find over all profit percent on both articles.
(a) 23% (b) 12 ½% (c) 5%
(d) 22 ½% (e) $27\frac{1}{2}\%$

52. Length of rectangle is 80% of diagonal of square, which area is 1225, then find area of rectangle if it's perimeter is $94\sqrt{2}$.
(a) 1016 (b) 500 (c)1604
(d) 1064 (e) 625

53. Annual salary of Arun is 7.68 lac. In a month if he spends 12000 on his children, 1/13th of rest on food and 8000 in mutual funds from his monthly salary, then find the monthly saving he is left with.
(a) 40,000 (b) 45,000 (c)50,000
(d) 36,000 (e) 38000

Directions (54-68): What should come in place question mark (?) following simplification problems?

54. $40\%\ of\ \left(\frac{20}{4}\times ?\right) = 48$
(a) 20 (b) 24 (c) 28
(d) 32 (e) 22

55. (2.5 + 1.5) (3.5 + 1.5) = ?
(a) 15 (b) 30 (c) 20
(d) 24 (e) 20.5

56. $40 \times 64 \div 80 = ?^2 + 7$
(a) 5 (b) 6 (c) 7
(d) 4 (e) 2

57. $25\%\ of\ 16 \times (15 - ?)^3 = 256$
(a) 15 (b) 13 (c) 9
(d) 11 (e) 7

58. $90 = 15\%\ of\ 1000 \times 3\%\ of \left(\frac{100}{?}\right)$
(a) 4 (b) 5 (c) 7
(d) 9 (e) 3

59. $? + 7^2 = (7 \times 4) + (43 \times 5)$
(a) 192 (b) 194 (c) 196
(d) 198 (e) 200

60. $3\frac{1}{3} - ? \times \frac{3^2}{2^3} = 2\frac{5}{6}$
(a) 2/3 (b) 2/9 (c) 4/9
(d) 9/4 (e) 7/9

61. $40\%\ of\ (102 \div 17) \times ? = 2^3 \times 6$
(a) 20 (b) 22 (c) 25
(d) 30 (e) 15

62. $? - 2^3 = (7^2 - 12) + (10^2 - 17)$
(a) 132 (b) 126 (c) 124
(d) 128 (e) 130

63. $400\%\ of\ ? = (13 \times 15) - (891 \div 9)$
(a) 20 (b) 24 (c) 22
(d) 28 (e) 18

64. $8^2 \times 8^2 = 2^? \times 2^6 \times 2^4$
(a) 1 (b) 3 (c) 2
(d) 0 (e) 4

65. $20\%\ of\ (2^2 \times 3^2) - 2 = ?$
(a) 2.5 (b) 5.2 (c) 5.4
(d) 5.6 (e) 6.2

66. $20\%\ of\ \frac{1}{5}\ of\ 2250 = 50 + ?$
(a) 55 (b) 90 (c) 50
(d) 40 (e) 45

67. $986 - 432 + 116 = ? + (13)^2$
(a)501 (b)505 (c)401
(d)451 (e)None of these

68. $14.2\%\ of\ 11000 + 15.6\%\ of\ ? = 3590$
(a)12000 (b)13000 (c)14560
(d)12250 (e)13500

69. A can do a work in 24 days, B is 20% more efficient than A, if C can do the work in 10 more days than B, find days taken by A and C together to complete the work.
(a) $\frac{20}{3}$ day (b) $\frac{44}{3}$days (c) $\frac{40}{3}$day
(d) 6 days (e) $\frac{46}{3}\ days$

70. The ratio of Milk to water is 5:4, if two litres of water is added ratio becomes 10:9, then find new amount of water in the mixture
(a) 14 L (b) 16 L (c) 18 L
(d) 20 L (e) 22 L

ENGLISH LANGUAGE

Directions (71-75): Read the following passage carefully and answer the questions given below it.

After major flooding in 1998, China introduced the Natural Forest Conservation Program, a logging ban to help protect against erosion and rapid runoff. A recent study in Science Advances of 10 years of satellite data found significant recovery in some Chinese forests. But it's not all good news. This reforestation is probably shifting deforestation elsewhere. They implemented two national programs. One was the Grain to Green program, which is basically to reconvert agricultural fields in steep slopes into forests. And the **other is the natural forest conservation program** which is, in a sense, a logging ban to prevent deforestation and also to increase the aerial forests. At regional scales, in the Sichuan province, the program seems to be working in the sense that there is forest regeneration, forest recovery. And so we wanted to see if that was the case on a national scale. And we also wanted to see if the program was, in fact, related with this regeneration.

China's conservation policies banned logging and employed locals as park rangers, protecting forests so that they could regrow. Research revealed that many of China's forests had in fact experienced regrowth over the last 10 to 15 years as a result of China's reforestation programs. Some 1.6 percent of China exceeded a net gain in forest cover, with a large chunk of the gains covering some 61,000 square miles in central China. Forest fires and other problems destroyed over 14,000 square miles of forest, meaning the total net gain for China was about 46,000 square miles. China's reforestation initiatives, in other words, have been a huge success. But this isn't necessarily a good thing. China, as it turns out, is just looking elsewhere to get the lumber products it needs.

China has become one of the leading timber importers in the world. It's Southeast Asia, Vietnam, Indonesia, as well as Africa, northern Eurasia, Russia are the ones that are now supplying all the gap that has been left by this program enacted. In a sense, the program exported the deforestation, and we basically also speculate that it's not just a climate issue, but also a biodiversity issue, because many of the places that are being deforested right now are also places of high biodiversity. We are replacing high biodiversity places in other places for relatively poor biodiversity forests in China.

We as consumers with user consumption habits and user consumption rates basically encourage China to participate in things like sustainable timber production certification. A lot of that timber that is imported is used to produce furniture, for example. But then is exported again to countries like the US and countries in Europe, etc. So, indirectly, we are contributing to this export of deforestation. What we do in one place will have repercussions beyond that particular place. Thinking of China as a vacuum, it's a win for China, but how much a reality in terms of climate change mitigation this program is accruing is still a question mark.

71. What is/are the efforts adopted by China for protection against erosion and run off?
(I) Increase in the aerial forest.
(II) reconverting agricultural fields in steep slopes into forests.
(III) a logging ban to help protect against erosion.
(a) Only (I) (b) Only (II)
(c) Both (I) and (II) (d) Both (II) and (III)
(e) All are correct

72. What does the author mean by the statement "China's reforestation is probably shifting deforestation elsewhere"?
(a) China is importing timber from other countries.
(b) China is importing wooden furniture from other countries.
(c) China is implementing the policies that are irresponsible for deforestation in other countries.
(d) China is destroying other country's forest reserves directly.
(e) All are correct

73. Which of the following statement(s) signifies that China's reforestation initiative is a huge success?
(a) Forests fires and other problems has diminished.
(b) There is a net gain in the total forest cover of China.
(c) China became the leading timber importers in the world.
(d) Both (a) and (b)
(e) All are correct

74. What is the central idea of the passage?
(a) Effects of conservation policy on China's forest recovery
(b) Certification of China's sustainable timber production.
(c) What China's successful reforestation program means for the rest of the world
(d) Success of China's reforestation policies.
(e) Deforestation issue in China and elsewhere: a global problem

75. According to the passage, how are we responsible for exporting deforestation?
(I) through unrestrained cutting of forests.
(II) through forest fires.
(III) by importing furniture from timber importing countries.
(a) Only (I) (b) Only (III)
(c) Both (I) and (II) (d) Both (II) and (III)
(e) All are correct

Directions (76-80): In each of the questions given below a sentence is given with one blank. Below each sentence FOUR words are given out of which two can fit the sentence. Five options are given with various combinations of these words . You must choose the combination with the correct set of words which can fit in the given sentence.

76. Parking fees and fines are _____ big bucks for councils in England.
(A) lending (B) providing
(C) distributing (D) contributing
(a) A-B (b) A-D (c) B-D
(d) C-D (e) A-C

77. This infographic should help to explain the _____ of the Zika outbreak and possible symptoms, treatment and prevention.
(A) sources (B) influences
(C) causes (D) evidences
(a) A-B (b) A-D (c) B-D
(d) C-D (e) A-C

78. When I was a child, I always _____ to be a superhero.
(A) wanted (B) needed
(C) desired (D) required
(a) A-B (b) A-D (c) B-D
(d) C-D (e) A-C

79. People who often smile sincerely radiate likeability, _____ easily with others and are appreciated more.
(A) hook up (B) incorporate
(C) connect (D) combine
(a) A-B (b) A-D (c) B-D
(d) C-D (e) A-C

80. I grew up and _____ that science fiction was not a good source for superpowers.
(A) resolved (B) realised
(C) discerned (D) elaborated
(a) A-B (b) A-D (c) B-C
(d) C-D (e) A-C

Directions (81-90): In each of the question given below a/an idiom/phrase is given in bold which is then followed by five options which then tries to decipher its meaning as used in the sentence. Choose the option which gives the meaning of the phrase most appropriately in context of the given sentence.

81. We have **bent over backwards** to ensure a fair trial for the defendants.
(a) Return (b) Tolerate
(c) Diminish (d) Failed (e)Strive

82. Can we please **get on**, because there are a lot of things still to discuss.
(a) Late (b) Friendly (c)Hurry
(d) Behave (e) continue

83. They will **buckle down** to negotiations over the next few months
(a) Turn (b) Determination (c) Fall
(d) Agree (e)Submit

84. I'm trying to **gear myself up** for tomorrow's exam.
(a) Prepare (b) Motivate (c)Relax
(d) Recharge (e) Accelerate

85. Dream on! I have a much better chance of getting it than you.
(a) Inactive (b) Loose (c) Unlikely
(d) Typical (e) Wait

86. She **perked up** as soon as I mentioned that Charles was coming to dinner.
(a) Stopped (b) Pleasure (c) Irritated
(d) Angry (e) Remember

87. I had to **lay off** the medication for a while to see if that was causing my headaches.
(a) Reduce (b) Change (c) Hiatus
(d) Ignore (e) Inspect

88. One voter in Brasilia **summed up** the mood– 'Politicians have lost credibility'
(a) Create (b) Display (c)Summarize
(d) Conclusion (e) Description

89. You'll have to **speak up** a bit if you want everyone to hear you.
(a) Talkative (b) Logical (c) Loud
(d) clear-headed (e) Sober

90. Their marriage **fell apart** when she found out about her husband's affair.
(a) Stumble (b) Dilemma (c) Weak
(d) Pieces (e) Collapse

Direction (91-100): In each of the questions given below a sentence is given which is then divided into five parts out of which last part is correct. There are errors in three parts of the sentence and only one part is correct. You must choose the part as your answer.

91. They have stayed (A)/ at Kashmir (B)/ for a very short (C)/ period of time and then (D)/ **they returned home.** (E)
(a) They have stayed
(b) at Kashmir
(c) for a very short
(d) period of time and then
(e) All are incorrect

92. I were surprised (A)/ to know why had he (B)/turned down such (C)/a good offers (D)/ **of marriage.** (E)
(a) I were surprised (b) to know why had he
(c) turned down such (d) a good offers
(e) All are incorrect

93. Everybody who was working(A)/ in that office give a day's pay (B)/ as their contributions to the (C)/ dependants of Dr. Sonu which (D)/ **had died on duty.** (E)
(a) Everybody who was working
(b) in that office give a day's pay
(c) as their contributions to the
(d) dependants of Dr. Sonu which
(e) All are incorrect

94. Those book is (A)/ undoubtedly preferable than (B)/ that in many respects and (C)/ their printing is also (D)/ **comparatively good.** (E)
(a) Those book is
(b) undoubtedly preferable than
(c) that in many respects and
(d) their printing is also
(e) All are incorrect

95. The audience would flock (A)/ at his concerts to (B)/ hear him to sing as they perceive (C)/ a sense of purity and piquancy in his music (D)/**that is hard to come by today.** (E)
(a) The audience would flock
(b) at his concerts to
(c) hear him to sing as they perceive
(d) a sense of purity and piquancy in his music
(e) All are incorrect

96. Here better to stay (A)/ at home than to (B)/ walk at the street when there (C)/ erupts a communal riot (D)/ **in the town**.(E)
(a) It was better to stay
(b) at home than to
(c) walk at the street when there
(d) erupts a communal riot
(e) All are incorrect

97. A Dogs soon (A)/ know the (B)/person whom (C)/ it are (D)/ **kindly treated.(**E)
(a) A Dogs soon (b) know the
(c) person whom (d) it are
(e) All are incorrect

98. This was only (A)/ two soldiers but (B)/ each and every soldier(C)/ was equal of (D)/ **five policemen**. (E)
(a) This was only
(b) two soldiers but
(c) each and every soldier
(d) was equal of
(e) All are incorrect

99. The majority of (A)/ the woman (B)/ teacher are persuading (C)/ the principal to considering (D)/ **their demands.**(E)
(a) The majority of
(b) the woman
(c) teacher are persuading
(d) the principal to considering
(e) All are incorrect

100. These type of books (A)/ are certainly helpful (B)/ to the students prepare (C)/ with the banking (D)/ **service examinations**. (E)
(a) These type of books
(b) are certainly helpful
(c) to the students prepare
(d) with the banking
(e) All are incorrect

adda247

Solutions

REASONING ABILITY

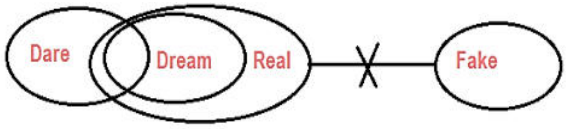
Directions (1-5):

Floor	Person
8	S
7	X
6	Z
5	T
4	V
3	W
2	U
1	Y

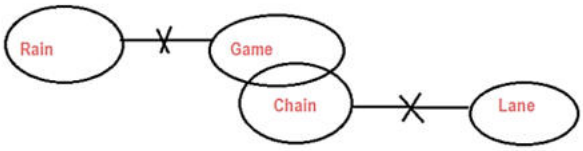
1. (d); 2. (b); 3. (b); 4. (b); 5. (c);

Direction (6-8):

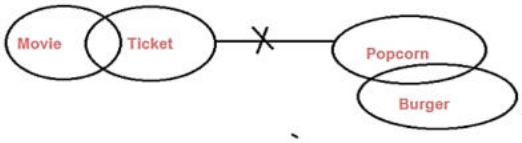
6. (b);



7. (a);



8. (c);



Direction (9-13):

9. (c) **10. (a)** **11. (b)**

12. (b) **13. (a)**

Direction(14-16):

14. (e); I. W>K(True) **II.** I>K(True)

15. (a); I. Q>K (True) **II.** Q=E(False)

16. (a); I. H > I(True) **II.** E > I(False)

Directions (17-21):

17. (a); ECB

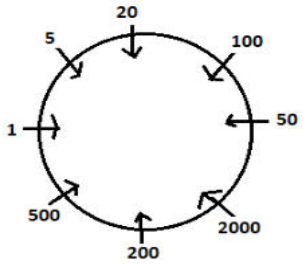
18. (d); F

19. (d); More than Five

20. (b); C

21. (b); 'Ten'

Direction (22-26):



22. (b) **23. (c)** **24. (d)**

25. (a) **26. (d)**

Direction (27-31):

27. (e) **28. (b)** **29. (b)**

30. (a) **31. (c)**

32. (c); 1, 5 and 7

33. (c);

34. (d);

35. (c);

QUANTITATIVE APTITUDE

36. (a); Speed of current = y = 3
Down stream speed = 9 × 3 = 27 km/h
Speed of boat in still water = x km/hr
x + y = 27
x = 24 ; ∵ y= 3
Distance travelled upstream in 5 hr = speed × Time
= (x – y) ×5
= (24 – 3) × 5
= 21 × 5= 105 km

37. (a); Let least even number = x
Consecutive even numbers ⇒ x, x+2, x+4, x+6
Let least odd number = y
Consecutive odd numbers = y, y + 2, y + 4
ATQ
[x + (x + 2) + (x + 4) + (x + 6)] – [y + (y + 2) + (y + 4)] = 81
4x + 12 – 3y – 6 = 81
4x – 3y = 75 ...(i)
Now,
sum of smallest even and odd numbers
x + y = 59 ...(ii)
solving (i) and (ii)
x = 36, y = 23
Now sum of largest even number and largest odd number ⇒
(36 + 6) + (23 + 4) = 69
Alternate ⇒
Sum of least even and odd number = 59
x + y = 59
Now 4th consecutive even number is x + 6 and 3rd consecutive odd number is y + 4.
Now ⇒
Required value
x + 6 + y + 4
= x + y + 10
= 59 + 10 = 69

38. (c); In scheme A Interest
$= \frac{x \times 8 \times 2}{100}$
In scheme B Interest
$\frac{(x + 1400) \times 12 \times 2}{100}$
ATQ,
$\frac{(x + 1400) \times 12 \times 2}{100} - \frac{X \times 8 \times 2}{100} = 880$
x = 6800

39. (c); Required ratio

$$= \frac{68+74+78}{90+86+84} = \frac{220}{260} = \frac{11}{13}$$

40. (d); Total books sold on Friday from Store C & D

$$= \frac{115}{100} \times 40 + \frac{120}{100} \times 95$$

$= 46 + 114 = 160$

41 (b); Required percentage

$$= \frac{(85+55)-(36+74)}{(36+74)} \times 100$$

$$= \frac{30}{110} \times 100 = 27\frac{3}{11}\%$$

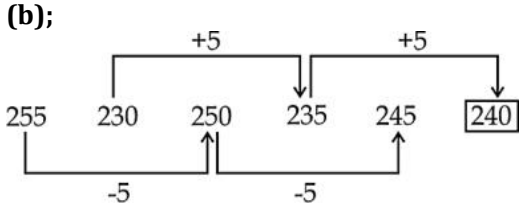
42. (e); Required average

$$= \frac{1}{3}(89+82+84) = \frac{1}{3} \times 255 = 85$$

43. (a); Required difference = (82 + 90) – (57 + 54)

= 172 – 111 = 61

44. (b);



45. (c); Series is ×0.5+ 1, ×1 + 1.5, ×1.5+2, ×2+2.5

∴ ? = 5 × 1.5 + 2 = 9.5

46. (d); Series is

8 × 0.5 = 4

4 × 1 = 4

4 × 2= 8

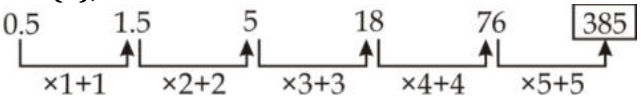
8 × 4 =32

32 × 8 = 256

47. (a); Series is $-1^2, -2^2, -3^2, -4^2$.....

∴ ? = 115 – 16 = 99

48. (b); Series is



49. (c); Average age of A and B 2 year ago = 26

$$Present\ Average\ age\ \frac{A+B}{2} = 28$$

Present age A + B = 56

A's age after 5 year = 40

Now A's age = 40 – 5 = 35

B's age = 56 – 35 = 21

C's age = 21 + 5 = 26

Required difference = 35 – 26 = 9

50. (e); X : Y = 2x : 3x

X + Y = 60

2x +3x = 60

x = 12

X =2x= 24

Y =3x= 36

X + Y+ Z = 24 × 3

60 + Z = 24 × 3

Z=12

X-Z= 24-12=12

51. (d); Let cost price of both article = 100x

Profit on sell of 1st article

= 40% of 100x = 40x

Selling price of 1st article = 140x

Selling price of 2nd Article

$$= 140x - \frac{140 \times 25}{100} = 105x$$

Profit of on 2nd Article = 105x – 100x = 5x

Overall profit percent = $\frac{45x}{200x} \times 100 = 22\frac{1}{2}\%$

52. (d); Area of square= 1225

$a^2 = 1225$

a = 35, diagonal of square = $a\sqrt{2} = 35\sqrt{2}$

length of rectangle = 80% of $35\sqrt{2}$

$l = 28\sqrt{2}$

Perimeter = $94\sqrt{2}$

$2(l+b) = 94\sqrt{2}$

$2l + 2b = 94\sqrt{2}$

$2b = 94\sqrt{2} - 56\sqrt{2}$

$2b = 38\sqrt{2}$

$b = 19\sqrt{2}$

Area= l × b = $28\sqrt{2} \times 19\sqrt{2}$ =1064

53. (a); $Monthly\ salary = \frac{7.68}{12} Lack = 64000$

Saving = Income – Expenditure

= 64000 – 12000 – 4000 – 8000 = 40,000

54. (b); $\frac{40}{100} \times 5 \times ? = 48$

⇒ ? = 24

55. (c); ? = 4 × 5

= 20

56. (a); $?^2 = \frac{40 \times 64}{80} - 7$

⇒ $?^2$ = 32 – 7

⇒ $?^2$ = 25

⇒ ? = 5

57. (d); $\frac{25}{100} \times 16 \times (15 - ?)^3 = 256$

⇒ $(15 - ?)^3 = 64$

⇒ ? = 11

58. (b); $90 = \frac{15}{100} \times 1000 \times \frac{3}{100} \times \frac{100}{?}$

$\Rightarrow ? = \frac{10}{2}$

⇒ ? = 5

59. (b); ? = 28 + 215 – 49
= 194

60. (c); $\frac{10}{3}-\frac{9}{8}\times ?=\frac{17}{6}$
$\Rightarrow \frac{9}{8}\times ?=\frac{1}{2}$
$\Rightarrow ?=\frac{4}{9}$

61. (a); $\frac{40}{100}\times 6\times ?=48$
$\Rightarrow ?=\frac{80}{4}$
$\Rightarrow ?=20$

62. (d); ? = 37 + 83 + 8
= 128

63. (b); 4 × ? = 195 – 99
$\Rightarrow ?=\frac{96}{4}$
$\Rightarrow ?=24$

64. (c); $2^{?}=2^{12-6-4}$
⇒ ? = 2

65. (b); $?=\frac{1}{5}\times 36-2$
= 7.2 – 2 = 5.2

66. (d); ? = 90 – 50 = 40

67. (a); $554+116-169=?$
$\Rightarrow ?=501$

68. (b); $1562+15.6\%\ of\ ?=3590$
$\Rightarrow ?=\frac{202800}{15.6}=13000$

69. (c); A can do work in = 24 days
B is with 20% more efficiency, so B can do same work in = 20 days
C can do the same work in = 20 + 10 = 30 days
One day work of A and C
$=\frac{1}{24}+\frac{1}{30}=\frac{5+4}{120}$
$=\frac{9}{120}\Rightarrow\frac{3}{40}$
Time require by A and C = 40/3 days

70. (c); $\frac{Milk}{Water}=\frac{5x}{4x}$
According to question
$\frac{5x}{4x+2}=\frac{10}{9}$
x = 4
New amount of water = 4x + 2 = 16 + 2= 18

ENGLISH LANGUAGE

71. (e); Refer first paragraph of the passage.

72. (a); Refer the second last paragraph of the passage "China has become one of the leading timber importers in the world. It's Southeast Asia, Vietnam, Indonesia, as well as Africa, northern Eurasia, Russia are the ones that are now supplying all the gap that has been left by this program enacted."

73. (b); Refer the second paragraph of the passage "Some 1.6 percent of China exceeded a net gain in forest cover, with a large chunk of the gains covering some 61,000 square miles in central China."

74. (c); The passage is about how China's reforestation policies affect the other countries.

75. (b); Refer the last few lines of the passage "A lot of that timber that is imported is used to produce furniture, for example. But then is exported again to countries like the US and countries in Europe, etc. So, indirectly, we are contributing to this export of deforestation."

76. (c); Here providing is a conjunction which means giving or contributing, which is similar to bringing.

77. (e); Cause means a person or thing that gives rise to an action, phenomenon, or condition, it has same meaning as source.

78. (e); Wanted and desired have same meaning that are making sentence meaningful.

79. (e); 'hook- up' and 'easily' are the correct set of words making the sentence meaningful.

80. (c); Realised means to become fully aware of (something) as a fact; understand clearly, has similar meaning as discerned.

81. (e); Bent over backwards means to try extremely hard to help or to please someone hence strive which means make great efforts to achieve or obtain something is the correct choice.

82. (e); If you get on with something, you continue doing it or start doing it.

83. (b); If you buckle down to something, you start working seriously at it.

84. (a); Gear up means to prepare for something that you have to do, or to prepare someone else for something.

85. (c); Dream on: Dream: used as an ironic comment on the unlikely nature of a plan or aspiration

86. (b); Perk up means to become or cause someone to become happier, more energetic, or more active:

87. (c); Lay off means to stop doing or using something, especially for a short period of time

88. (c); Sum up means to give a brief summary.

89. (c); Speak up here means to speak in a louder voice so that people can hear you.

90. (e); If an organization, system, or agreement falls apart, it fails or stops working effectively.

91. (c); (D) is incorrect as the use of 'of time' is superfluous because 'for a short period' or 'for a short time' is used. 'at' is incorrect because for smaller places. The use of 'have' in (A) is incorrect as the fixed part is in past tense. The use of 'at' in (B) is incorrect and 'in' will be used.
Ex. He stayed here for a short period.

92. (c); In (B) use 'why he had' in place of 'why had he' because reported speech is assertive in indirect narration. In (A) use 'was' in place of 'were'.

93. (a); In (B) use 'give' in place of 'gave'. In (C) use 'his' in place of 'their' because the subject of the sentence is 'Everybody', hence possessive pronoun 'his' and reflexive pronoun 'himself' is used for that.

94. (c); In (B) in place of 'than', 'to' will be used. Always remember preposition 'to' is used after preferable/ prefer and not conjunction 'than'.

95. (d); Use of 'would' is incorrect as 'will' should be used because the fixed sentence is in present tense. In (B) use of 'at' is incorrect as 'to' must be used. In (C) 'to' will not be used because the correct syntax 'hear + object + V1' is used.
Ex. I heard him sing.

96. (d); Use of 'was' in (A) is incorrect. In (B)Remove 'to' after 'than' as in the case of comparison between two infinitives, infinitive 'to' is not used after 'than' in the later one, V1 is used.
Ex. You had better to do some work than wander.
In (C) 'at' is incorrect as 'is' should be used.

97. (b); In (C) use 'by' before 'whom' to make the sentence grammatically correct. Look at these sentences;
I know the man **by whom he was helped**. [Passive]
I know the man **who helped** him. [Active]

98. (b); In (C) replace 'each and every' by 'each' as '**each**' is used for '**two or more than two**' while '**every**' or '**each and every**' is always used for '**more than two**'.
e.g. There were **two boys** and **each** boy had a red pen.
There were **ten students** in the class room and **each/every/each and every** student had a red pen.

99. (a); In (b) use 'women' in place of 'woman' as in compound nouns made of 'man' or 'woman', plural form is used in both the parts. Ex.'men conductors', 'man conductor'.

100.(b); Use 'types' in place of 'type' because after demonstrative adjectives like these/ those/ certain/ other etc. noun is always in plural number.
In (D) use 'for' in place of with.

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Mock 26

IBPS Clerk Prelims 2016

REASONING ABILITY

Directions (1-5): In each of the following questions assuming the given statements to be true, find out which of the two conclusions I and II given below them is/are definitely true.

Give answer

(a) if only conclusion I is true.
(b) if only conclusion II is true.
(c) if either conclusion I or conclusion II is true
(d) if neither conclusions I nor conclusion II is true.
(e) if both conclusions I and II are true.

1. Statements: Q = H , H <L, L <F
Conclusions: I. Q <F **II.** H <F

2. Statements: D >E, E ≥I, I ≥K
Conclusions: I. D ≥I **II.** E ≥K

3. Statements: V <W, W ≤U, U <R
Conclusions: I. V <R **II.** W <R

4. Statements: F <J, J ≤T, T ≥R
Conclusions: I. F >T **II.** F = R

5. Statements: M >K, K =H, H ≥L
Conclusions: I. M> L **II.** M <H

Directions (6-10): Study the flowing information carefully to answer these questions.
Eight friends A, B, C, D E, F G and H are sitting around a circle facing the centre. A sits third to the left of B, and second to the right of F. D does not sit next to A or B. C and G always sit next to each other. H never sits next to D and C does not sit next to B.

6. Which of the following pairs sits between H and E?
(a) F, D (b) H, B (c) C, G
(d) E, G (e) CB

7. Starting from A's position , if all the eight were arranged in alphabetical order in clockwise direction the seating position of how many members (excluding A) not change?
(a) None (b) one (c) Two
(d) Three (e) None of these

8. Which of the following pairs has only one person sitting between them, if the counting is done in clockwise direction?
(a) A, B (b) C,D (c) F, E
(d) G,H (e) CB

9. Who sits to the immediate right of E?
(a) A (b) D (c) F
(d) H (e) None of these

10. What is the position of B with respect to C?
(a) Second to the left (b) Third to the right
(c) Third to the left (d) Fourth to the right
(e) None of these

Directions (11-15): To answer these questions study carefully the following arrangement of symbols, digits and letters.

W % 9 3 G 6 H # 7 K $ L 2 ★ B M J © 4 5 E 8 @ Z

11. If all the numbers are deleted from the above arrangement then which of the following will be seventh to the left of sixth from the right?
(a) H (b) J (c) M
(d) $ (e) None of these

12. How many such numbers are there in the above arrangement each of which is immediately preceded by a symbol?
(a) One (b) Two (c) Three
(d) Four (e) None of these

13. '9W' is related to 'GH#' and '$7' is related to '2BM' in the same way as '4J' is to _____ in the arrangement.
(a) E@8 (b) 58® (c) B2L
(d) 58Z (e) None of these

14. How many such symbols are there in the above arrangement each of which is immediately followed by a letter?
(a) None (b) One (c) Two
(d) Three (e) None of these

15. If all the symbols are deleted from the above arrangement then which of the following will be the fourth to the left of twelfth from the right?
(a) 9 (b) 3 (c) W
(d) M (e) None of these

Directions (16-20): Study the following information carefully and answer the question given below-
Eight people are sitting in two parallel rows containing four people each, in such a way that there is an equal distance between adjacent persons. In row 1-A, B, C and D are seated and all of them are facing south. In row 2- P, Q,

R and S are seated and all of them are facing north. Therefore in the given seating arrangement each member seated in a row faces another member of the other row. R sits second to the left of person who faces A. S is an immediate neighbor of R. Only one person sits between A and D. One of the immediate neighbours of C faces Q. B does not sit at any of the extreme end of the line.

16. Who amongst the following sits second to the right of person who faces P?
(a) A (b) B (c) C
(d) D (e) Can't be determined

17. Four of the following five are alike in certain way and thus form a group. Which is the one that does not belong to that group?
(a) C (b) R (c) Q
(d) P (e) D

18. Which of the following is true regarding C?
(a) C sits second to the right of D
(b) A sits to the immediate right of C
(c) S faces C
(d) D is an immediate neighbor of C
(e) The person who faces C is an immediate neighbor of R

19. Who amongst the following faces R?
(a) A (b) B (c) C
(d) D (e) Can't be determined

20. Who amongst the following faces B?
(a)P (b) Q (c) R
(d) S (e) Can't be determined

Directions (21-25): These questions are based on five words given below:
THE MOD CPU RBM SHE
(**Note:** The words formed after performing the given operations may or may not be a meaningful English word.)

21. If the second alphabet in each of the word is changed to the previous alphabet in English alphabetical order, how many words thus formed have more than one vowel?
(a) None (b) One (c) Two
(d) Three (e) None of the above

22. If in each of the words, all the alphabets are arranged in English alphabetical order within the word, how many words will begin with a vowel?
(a) One (b) Two (c) Three
(d) Four (e) None of the above

23. How many letters are there in the English alphabetical series between the third letter of the second word from the left and second letter of the second word from the right?
(a) One (b) Two (c) Three
(d) Four (e) None of the above

24. If the given words are arranged in the order as they would appear in the English dictionary from left to right, which of the following will be the fourth from the left?
(a) RBM (b) SHE (c) CPU
(d) MOD (e) THE

25. If in each of the given words, each of the consonants is changed to the previous letter and each vowel is changed to the next letter in English alphabetical series, in how many words thus formed will there be no vowel?
(a) One (b) Two (c) Three
(d) Four (e) None of the above

Directions (26-30): Study the following information and answer the questions that follow.
Eight people E, F, G, H, L, M, N, O are sitting in a straight line facing North. H is sitting second to the right of N and L is sitting fourth to the right of H. M is sitting to the right of F. Number of persons can sit between G and L is same as the number of persons are sitting between O and F. O is sitting to the immediate left of G who is not an immediate neighbor of L. F is not an immediate neighbor of N.

26. If all the given alphabets are arranged in ascending order from left to right, positions of how many of them will remain unchanged?
(a) None (b) One (c) Two
(d) Three (e) More than three

27. Which amongst the following two are sitting at the corners?
(a) N,M (b) E,L (c) O,E
(d) None of these (e) Cannot be determined

28. Based on the given arrangement, E is related to O and H is related to G in a same way as O is related to ?
(a) M (b) F (c) L
(d) E (e) None of these

29. How many persons are sitting between E and M?
(a) One (b) Two (c) Three
(d) Four (e) More than four

30. Who is sitting third to the left of H?
(a) E
(b) N
(c) No one, as only two persons are sitting to the left of H.
(d) L
(e) None of these

31. If in a code language, LAUNCH is written as NCWPEJ and MARGIN is written as OCTIKP, how will WONDER be written in that code?
(a) PQYFGT (b) YQPFGT (c) YQPGFT
(d) YQPTGF (e) None of these

32. If the letters in the word EQUALITY rearranged as they appear in the English alphabet then the position of how many letter will remain unchanged after the rearrangement?
(a) None (b) One (c) Two
(d) Three (e) More than three

33. If it is possible to make only one meaningful word with the first, the third, the fifth and the eight Numbers of the word SHAREHOLDING, which of the following will be the second letter of the word? If no such word can be made, give 'X' as the answer and if more than one such word can be made, give 'Y' as the answer.
(a) L (b) E (c) S
(d) X (e) Y

34. How many such pairs of Numbers are there in the 7693142, each of which has as many Numbers between them in the number, as they have in the numeric series?
(a) None (b) One (c) Two
(d) Three (e) More than three.

35. What should come in place of the questions mark (?) in the following series based on the above arrangement?
AZ2 DW3 GT5 JQ7 ?
(a) LN9 (b) NM9 (c) MN9
(d) MN11 (e) None of these

QUANTITATIVE APTITUDE

Directions (36-40): What will come in the place of the question mark (?) in the following number series?

36. 9, 11, 16, 26, ?, 69
(a) 40 (b) 41 (c) 42
(d) 43 (e) None of these

37. 3, 4, 10, 33, 136, ?
(a) 700 (b) 590 (c) 695
(d) 685 (e) None of these

38. 21, 24, 32, 45, 63, ?
(a) 85 (b) 86 (c) 84
(d) 82 (e) None of these

39. 6, 3, 3, 6, 24, ?
(a) 192 (b) 191 (c) 190
(d) 189 (e) None of these

40. 7, 10, 16, 28, ?, 100
(a) 49 (b) 53 (c) 50
(d) 51 (e) 52

41. 5% of one number (X) is 25% more than another number (Y). If the difference between the numbers is 96 then find the value of X?
(a) 90 (b) 100 (c) 92
(d) 96 (e) None of these

42. The ratio of A's age 3 years ago and B's age 5 years ago is 4:5. If A is 4 years younger than B then what is the present age of B?
(a) 16 (b) 14 (c) 11
(d) 15 (e) None of these

43. Two pipes A and B can fill a tank in 16 hrs and 12 hrs respectively. The capacity of the tank is 240 litres. Both the pipes are opened simultaneously and closed after 2 hrs each. How much more water (In Liters) needed to fill the tank?
(a) 100 (b) 170 (c) 70
(d) 190 (e) None of these

44. A person cover 32km downstream is 240 minutes and same person cover 48 km upstream in 1440 minutes. Then find the rate of current?
(a) 4kmph (b) 5kmph (c) 3kmph
(d) 2kmph (e) None of these

45. The simple interest on a certain sum at 15% per annum for 5 year is Rs1500 more to the simple interest on the same at 12% per annum for the same period. Find the sum-
(a) Rs 12000 (b) Rs12500 (c) Rs 8000
(d) Rs 10000 (e) None of these

46. The numerator of a fraction is decreased by 25% and the denominator is increased by 250%. If the resultant fraction is $\frac{6}{5}$, what is the original fraction?
(a) $\frac{22}{5}$ (b) $\frac{24}{5}$ (c) $\frac{27}{6}$
(d) $\frac{28}{5}$ (e) $\frac{30}{11}$

47. A dishonest vendor professes to sell fruits at the cost price but he uses a weight of 800 grams in lieu of 1 kg weight.
Find his percentage gain.
(a) 22% (b) 24% (c) 25%
(d) 30% (e) 20%

48. A is 2.5 times as good workman as B and A is able to finish the work in 50 days less than B. Find the time in which they can do it working together.
(a) $21\frac{5}{7}$ days (b) $23\frac{17}{21}$ days (c) $20\frac{3}{4}$ days
(d) $25\frac{1}{2}$ days (e) $22\frac{11}{19}$ days

49. The total of the ages of a class of 60 girls is 900 years. The average age of 20 girls is 12 years and that of the other 20 girls is 16 years. What is the average age of the remaining girls?
(a) 14 years (b) 15 years (c) 16 years
(d) 17 years (e) none of these

50. Mr. Ankit invests 14% of his monthly income every month i.e. Rs. 1,750 in shares, 8% in Insurance policies and 7% in fixed deposits. What is the total annual amount invested by him?
(a) Rs. 3275 (b) Rs. 3450 (c) Rs. 3625
(d) Rs. 3800 (e) none of these

Directions (51-55): Given below is the table showing marks (out of 100) of 5 students A, B, C, D and E in class test on different days of a week.

	A	B	C	D	E
Monday	74	65	36	59	84
Tuesday	69	68	70	51	72
Wednesday	49	82	75	64	59
Thursday	55	72	62	70	68
Friday	67	56	77	81	74

51. What is the difference between total score of B on Monday, Wednesday and Thursday together and the total score of E on Tuesday, Wednesday and Friday together?
(a) 12 (b) 14 (c) 10
(d) 20 (e) None of these

52. Marks of E on Monday is what percent more than marks of B on Thursday?
(a) 15% (b) $16\frac{2}{3}\%$ (c) 20%
(d) 25% (e) None of these

53. What is the average marks scored by C on the given days ?
(a) 60 (b) 62 (c) 52
(d) 64 (e) None of these

54. What is the ratio of total marks scored by C on Tuesday and Wednesday together to the total marks cored by D on the same days together?
(a) 23 : 28 (b) 28 : 23 (c) 29 : 23
(d) 23 : 29 (e) None of these

55. Total marks scored by E on all days together are how much more than total marks scored by A on all days together?
(a) 43 (b) 45 (c) 55
(d) 65 (e) None of these

Directions (56 - 70): What should come in place of question mark (?) in the following questions?

56. 36%of 170+? %of 592 = 150
(a) 14.6 (b) 17.8 (c) 16.4
(d) 15 (e) None of these

57. (12.11)2 + (?)2 = 732.2921
(a) 20.2 (b) 24.2 (c) 23.1
(d) 19.2 (e) None of these

58. 288 ÷ ?x 57 = 2052
(a) 8 (b) 7 (c) 6
(d) 9 (e) None of these

59. (1125—274—323)÷(875—654— 155) =?
(a) 9 (b) 6 (c) 7
(d) 8 (e) None of these

60. (882÷6.3) x 26 =?
(a) 3482 (b) 3840 (c) 5061
(d) 3618 (e) None of these

61. 115% of 4880 – 85% of 1640 = ?
(a) 4218 (b) 4368 (c) 4448
(d) 4628 (e) None of these

62. 3251+ 587 + 369 – ? = 3007
(a) 1250 (b) 1300 (c) 1375
(d) 1400 (e) None of these

63. 21 × 7921 = ? +89
(a) 166254 (b) 166259 (c) 166253
(d) 166252 (e) None of these

64. 18.6 × 3 + 7.2 – 16.5 = ? + 21.7
(a) 35.7 (b) 21.6 (c) 24.8
(d) 27.6 (e) None of these

65. 5.35 + 4.43 + 0.45 + 45.34 + 534 = ?
(a) 597.27 (b) 589.57 (c) 596.87
(d) 596.67 (e) None of these

66. 33 × 1331 = 121 ×?
(a) 443 (b) 673 (c) 363
(d) 303 (e) None of these

67. 0.5% of 674 of 0.8% of 225 = ?
(a) 7.066 (b) 9.12 (c) 6.066
(d) 5.17 (e) None of these

68. 66×66−34×34 = ?
(a) 2878 (b) 3200 (c) 3608
(d) 3456 (e) None of these

69. 56% of 225 + 20% of 150 = ? – 109
(a) 49 (b) 103 (c) 53
(d) 47 (e) None of these

70. 12% of 1885 = ? ÷ 6
(a) 1248.4 (b) 1292.2 (c) 1312.6
(d) 1357.2 (e) None of these

ENGLISH LANGUAGE

Directions (71–80): Read the following passage carefully and answer the questions given below it. Certain words/ phrases are given in bold to help you locate them while answering some for the questions.

King Hutamasan felt he had everything in the world not only due to his riches and his noble knights, but because of his beautiful queen, Rani Matsya. The rays of the sun were put to shame with the iridescent light that Matsya illuminated, with her beauty and brains. At the right hand of the king she was known to sit and aid him in all his judicial probes. You could not escape her deep-set eyes when you committed a crime as she always knew the victim and the culprit. Her generosity preceded her reputation in the kingdom and her **hands** were always full to give. People in the kingdom **revered** her because if she passed by, she always gave to the compassionate and poor.

Far away from the kingly palace lived a man named Raman, with only ends to his poverty and no means to rectify it. Raman was wrecked with poverty as he had lost all his land to the landlord. His age enabled him little towards manual labour and so begging was the only alternative to salvage his wife and children. Every morning he went door to door for some work, food and money. The kindness of people always got him enough to take home. But Raman was a little self-centered. His world began with him first, followed by his family and the rest. So he would eat and drink to his delight and return home with whatever he found excess. This routine followed and he never let anyone discover his interests as he always put on a long face when he reached home.

One day as he was relishing the bowl of rice he had just received from a humble home, he heard that Rani Matsya was to pass from the very place he was standing. Her generosity had reached his ears and he knew if he pulled a long face and showed how poor he was, she would hand him a bag full of gold coins-enough for the rest of his life, enough to buy food and supplies for his family. He thought he could keep some coins for himself and only **reveal** a few to his wife, so he can fulfill his own wishes.

He ran to the chariot of the Rani and begged her soldiers to allow him to speak to the queen. Listening to the arguments outside Rani Matsya opened the curtains of her chariot and asked Raman what he wanted. Raman went on his knees and praised the queen, "I have heard you are most generous and most chaste, show this beggar some charity. Rani narrowed her brows and asked Raman what he could give her in return. Surprised by such a question, Raman looked at his bowl full of rice. With spite in him he just picked up a few grains of rice and gave it to her. Rani Matsya counted the five grains and looked at his bowl full of rice and said, you shall be given what is due to you. Saying this, the chariot **galloped** away.

Raman abused her under his breath. This he never thought would happen. How could she ask him for something in return when she had not given him anything? Irritated with anger he stormed home and gave his wife the bowl of rice. Just then he saw a sack at the entrance. His wife said some men had come and kept it there. He opened it to find it full of rice. He put his hand inside and caught hold of a hard metal only to discover it was a gold coin. **Elated** he upturned the sack to find five gold coins in exact for the five rice grains. If only I had given my entire bowl, thought Raman, I would have had a sack full of gold.

71. According to the passage, which of the following is definitely true about Rani Matsya?
(A) She was beautiful
(B) She was intelligent
(C) She was kind
(a) Only (A)
(b) Only (B)
(c) Only (C)
(d) Only (A) and (C)
(e) All the three (A), (B) and (C)

72. What does the phrase 'pulled a long face', as used in the passage mean?
(a) Scratched his face
(b) Looked very sorrowful
(c) Disguised himself
(d) Put on makeup
(e) None of these

73. What can possibly be the moral of the story?
(a) Do onto others as you would want others to do to you.
(b) Patience is a virtue.
(c) Winning is not everything, it is the journey that counts.
(d) Change is the only constant thing in life.
(e) Teamwork is more we and less me

74. Why was begging the only option for Raman to get food?
(a) Raman belonged to a family of beggars.
(b) Begging was the easiest way for him to obtain food.
(c) Raman's family had forced him to beg.
(d) He had lost all his property and was too old to do manual work.
(e) None of these

75. Which of the following words can be used to describe Raman?
(A) Deceitful (B) Selfish (C) Timid
(a) Only (A) (b) Only (B)
(c) Only (A) and (B) (d) Only (B) and (C)
(e) All the three (A), (B) and (C)

76. Choose the word which is most similar in meaning to the word given below, as used in the passage.
GALLOPED
(a) hurtled (b) stumbled (c) slumbered
(d) jumped (e) ran

77. Choose the word which is most similar in meaning to the word given below, as used in the passage.
REVERED
(a) remembered (b) feared
(c) talked about (d) embraced
(e) respected

78. Choose the word which is most similar in meaning to the word given below, as used in the passage.
HANDS
(a) arm (b) throw (c) give
(d) limb (e) lend

79. Choose the word which is most opposite in meaning to the word given below, as used in the passage.
REVEAL
(a) stop (b) conceal (c) present
(d) pending (e) tell

80. Choose the word which is most opposite in meaning to the word given below, as used in the passage.
ELATED
(a) afraid (b) poor (c) happy
(d) depressed (e) grounded

Directions (81-90): Find out the error, if any. If there is no error, the answer is (e), i.e. No error. (Ignore the errors of punctuation, if any.)

81. Despite of their best efforts (a)/ they failed to retain (b)/ the contract due to (c)/ unwanted political interference. (d)/ No error (e).

82. We had decided (a)/ to scrap the project (b)/ but the chairman insisted with (c)/ its continuation on the same terms. (d)/ No error (e).

83. Because of his prolonged illness (a)/ he could not concentrate (b)/ on his studies although (c)/ he was very much desired to do so. (d)/ No error (e).

84. You must realize (a)/ how importance it is (b)/ to give away to the needy (c)/ whatever you possess in excess. (d)/ No error (e).

85. Most of the travellers experienced (a)/ a shock when they arrived (b)/ at the museum only to find (c)/ that it had been burgled. (d)/ No error (e).

86. How people do (a)/ to earn their bread (b)/ is dependent largely on (c)/ the locality where they live. (d)/ No error (e).

87. He took a sharp knife (a)/ and torn the covering. (b)/ made of cardboard (c)/ but could not open the packet. (d)/ No error (e).

88. All of us are aware that (a)/ Shankar has been suffering (b)/ from fever since ten days (c)/ and has been resting. (d)/ No error (e)

89. Both of them genuinely helped (a)/ each other when their (b)/ families were going (c)/ through a bad patch. (d)/ No error (e)

90. Some people have (a)/ generously contributed to the welfare fund (b)/ but they wanted that there names (c)/ should not be published. (d)/ No error (e).

Directions (91-100): In the following passage, some of the words have been left out, each of which is indicated by a number. Find the suitable word from the options given against each number and fill up the blanks with appropriate words to make the paragraph meaningfully complete.

Once upon a time there was a prince who wanted to marry a princess; but she would have to be a real princess. He **...(91)...** all over the world to find one, but nowhere could he get what he wanted. One evening during a terrible storm; there was thunder and lightning, and the rain poured down in torrents. Suddenly a knocking was **..(92)..** at the palace door, and the old king went to open it. It was a princess standing out there. But, good gracious ! What a sight the rain and the wind had made her look. The water ran down her hair and clothes; into the toes of her shoes and out again at the heels. And yet she insisted that she was a real princess. Well, we'll soon **...(93)...** out, thought the old queen. But she said nothing, went into the bedroom, took all the bedding off the bedstead, and **..(94)..** a pea on the bottom; then she took twenty mattresses and laid them on the pea, and then twenty quilts on **...(95)...** of the mattresses. On this the princess had to lie all night. In the **..(96)..** she was asked how she had slept. "Oh, very badly !" said she. "I scarcely closed my eyes all night. Heaven only knows what was in the bed. But I was lying on something hard, as a**...(97)...** I am black and blue all over my body. It's horrible !" Now they knew that she was a real princess because she had **..(98)..** the pea right through the twenty mattresses and the twenty quilts. Nobody but a real princess could be as irritable **..(99)..** as that. So the prince took her for his wife, for now he**...(100)...** that he had a real princess.

91. (a) called (b) tour (c) sent (d) saw (e) travelled

92. (a) made (b) felt (c) heard (d) seen (e) sounded

93. (a) assure (b) find (c) judge (d) mark (e) try

94. (a) drew (b) flung (c) placed (d) cooked (e) stitch

95. (a) top (b) head (c) bottom (d) between (E) middle

96. (a) morning (b) dinner (c) room (d) fields (e) dark

97. (a) vengeance (b) price (c) cause (d) result (e) time

98. (a) slept (b) felt (c) located (d) carried (e) found

99. (a) worried (b) rough (c) irritable (d) sensitive (e) pretty

100. (a) trust (b) assured (c) wanted (d) think (e) knew

Solutions

REASONING ABILITY

Direction (1-5)

1. (e); Q < F(True)H < F(True)

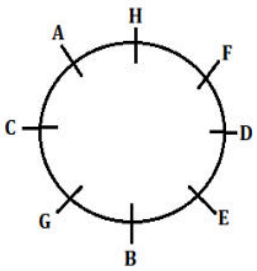
2. (b); $D \geq I(False) E \geq K(True)$

3. (e); $V < R(True) W < R(True)$

4. (d); $F > T(False) F = R(False)$

5. (a); $M > L(True) M < H(False)$

Direction (6-10)



6. (a); **7. (d);** **8. (c);**

9. (b); **10. (e);**

11. (a); L=7th

R=6th

R=13th

12. (c); %9,#7,©4

13. (e); E@Z

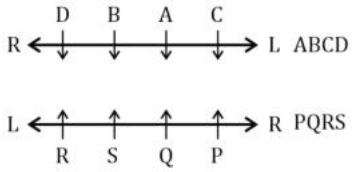
14. (d); $L , ★ B, @Z

15. (b); L=4th

R=12th

R=16th

Direction (16-20)



16. (b); **17. (c);** **18. (b);**

19. (d); **20. (d);**

21. (b); After changing the words become:

TGE MND COU RAM SGE

Hence, there is only one word COU having more than one vowel.

22. (b); After changing, the words become

EHT DMO CPU BMR EHS

23. (a); Third letter of the second word from left is D.

Second letter of the second word from right is B.

There are one letters between B and D.

B C D

24. (b); After arranging the words, we get

CPU MOD RBM SHE THE

↓

Fourth from left

25. (c); After changing, we get

THE MOD CPU

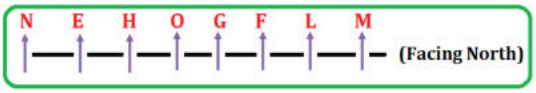
SGF LPC BOV

RBM SHE

QAL RGF

Hence there are three words which have no vowel.

Direction (26-30):



26. (a); **27. (a);** **28. (b);**

29. (e); **30. (c);**

31. (b);+1..+1...+1...+1..

32. (b);

E Q U A L I T Y
A E I L Q T U Y

33. (e);SALE, SEAL

34. (c);

35. (d);Opposite of M is N and followed by Prime number.

QUANTITATIVE APTITUDE

36. (d);

9 11 16 26 ? 69
2 5 10 17 26
3 5 7 9
? = 43

37. (d);(× 1 +1), (× 2 + 2), (× 3 + 3) .....
136×5+5= 685

38. (b);

21 24 32 45 63 ?
3 8 13 18 23
5 5 5 5
? = 86

39. (a);(× 0.5), (× 1), (× 2), (× 4), (× 8)
24 × 8 = 192

40. (e);

7 10 16 28 ? 100
3 6 12 24 48
? = 52

41. (b);0.05 (X) = $\frac{125}{100}$ (Y)
X – Y = 96
Y = 4, X = 100

42. (d);A = B – 4
$\frac{(B-4)-3}{B-5}=\frac{4}{5}$
B = 15, A = 11

43. (b);Per hour fill by A & B = $\frac{1}{16}+\frac{1}{12}=\frac{7}{48}$
Tank filled in 2 hours = $\frac{14}{48}\times240$= 70 ℓ
Water needed to fill the tank = 240 – 70 = 170ℓ

44. (c); Let speed of person = x kmph
Speed of current = y kmph
x + y = 8 ⇒ x – y = 2
x = 5 kmph, y = 3 kmph

45. (d);75% of P – 60% of P = 1500
P = Rs. 10000

46. (d); $\frac{x-\frac{25x}{100}}{y+\frac{250y}{100}}=\frac{6}{5}$ ⇒ $\frac{75x}{350y}=\frac{6}{5}$
75x = 420y
$\frac{x}{y}=\frac{420}{75}$ ⇒ $\frac{x}{y}=\frac{28}{5}$

47. (c); Percentage gain = $\frac{200}{800}\times100$ = 25%

48. (b);Let B's 1 day work = $\frac{1}{x}$
∴ A's 1 day work = $\frac{1}{x}\times\frac{5}{2}$
Now, $\frac{2x}{5}$ = x – 50
$\frac{3x}{5}$ = 50 ⇒ x = $\frac{250}{3}$
∴ Required days = $\frac{1}{\frac{3}{250}+\frac{3}{100}}=\frac{500}{6+15}=23\frac{17}{21}$

49. (d);20 (12) + 20 (16) + 20x = 900
20x = 900 – 240 – 320
20x = 340
x = 17years

50. (e);Monthly salary = $\frac{1750\times100}{14}$ = 12500
Total monthly salary invested by him
= $\frac{(14+8+7)}{100}$ × 12500 = 3625
Annual investment = 12 × 3625 = 43500

51. (b);Required difference = (65 + 82 + 72) – (72 + 59 + 74)
= 219 – 205 = 14

52. (b);Required percentage = $\frac{(84-72)}{72}\times100=16\frac{2}{3}\%$

53. (d);Required average = $\frac{320}{5}$=64

54. (c); Required ratio = $\frac{(70+75)}{(51+64)}$ =29 : 23 = 29 : 23

55. (a);Required difference = 357 – 314 = 43

56. (d);61.2+?× 5.92 = 150
or, ? = $\frac{88.8}{5.92}$ = 15

57. (b);?^{2} = 732.2921 – 146.6521
or ? = 24.2

58. (a);? = $\frac{288\times57}{2052}$ = 8

59. (d);528 ÷ 66 = 8

60. (e);? = (882 ×6.3)×26 = 3640

61. (a);? = 5612 – 1394 = 4218

62. (e);? = 4207 – 3007 = 1200

63. (d); ? = 21 × 7921 – 89 = 166252

64. (c); ? = 55.8 + 7.2 – 38.2 = 24.8

65. (b); ? = 589.57

66. (c); ? = $\frac{33\times1331}{121}$=363

67. (c); ? = $\frac{0.5}{100}\times674\times\frac{0.8}{100}\times225$ = 6.066

68. (b); ? = $66^2 - 34^2$ =100×32 = 3200

69. (e); ? = 126 + 30 + 109 = 265

70. (d); ? = 226.2 × 6 = 1357.2

ENGLISH LANGUAGE

71. (e); The first paragraph of the passage states that Rani Matsya was beautiful. She assisted the king in his judicial probes and would always keep her finger on the pulse of victims and culprits. Also, she was generous and her hands always reached out to help the compassionate and the poor. So, we can conclude that Rani Matsya was beautiful, kind and intelligent. Hence, option (e) is the correct answer.

72. (b); The phrase 'pulled a long face' means to have an unhappy or disappointed expression. Hence, option (b) is the correct answer.

73. (a); The story in the given passage revolves around the generous Rani Matsya and self-centered Raman. He desired for a bag full of gold coins, which would enable him to buy food and supplies for his family. When Rani asked Raman what he could give her in return, he simply gave five grains of rice to her and in turn Rani gave him only five gold coins. At that moment, Raman realized that if he had given the entire bowl, the Rani would have given him a sack full of gold coins. So, the moral of the story is 'do onto others as you want others to do to you.' Hence, option (a) is the correct answer.

74. (d); The second paragraph of the passage clearly states that Raman was wrecked with poverty as he had lost all his land to the landlord and his age enabled him little towards manual work. So, begging was the only option to salvage his wife and children. Hence, option (d) is the correct answer.

75. (c); The second paragraph of the passage states that Raman was self-centered. He would eat and drink to his heart's content and return home with whatever he found excess. So, we can conclude that Raman was 'selfish'. 'Deceitful' means behaving in a dishonest way by telling lies. We can say Raman was 'deceitful' because he never let anyone discover his interests as he always put a long face when he returned home. Hence, option (c) is the correct answer.

76. (e); '**Galloped**' refers to the way a horse or any animal moves when it is running very fast. Hence, option (e) is the correct answer.

77. (e); '**Revered**' means to show a great respect or admiration for someone. Hence, option (e) is the correct answer.

78. (d); '**Hands**' is a synonym of 'limb' because both are used as a grasping organ. Hence, option (d) is the correct answer.

79. (b); '**Reveal**' means to make something known to somebody. 'Conceal', which means to keep something secret, is an antonym of the word. Hence, option (b) is the correct answer.

80. (d); '**Elated**' means very happy and excited. 'Depressed' is opposite in meaning to the word. Hence, option (d) is the correct answer.

81. (a); You can use either 'in spite of' or 'despite'. Despite is never followed by 'of'

82. (c); Insist is always followed by 'on'

83. (d); Replace 'desire' with 'desirous' because an adjective is required to qualify the subject 'He'.

84. (b); Use 'important' in place of 'importance' because 'How' is an adverb and adverb cannot qualify Noun 'importance'

85. (e); No error

86. (a); Here an interrogative pronoun is required as the object to the verb 'do' so 'what' should be used because 'how' is not a pronoun. For example, what you have said is not true.

87. (b); Replace 'torn' with tore because 'torn' is V^3 and 'tore' is V^2.

88. (c); Use 'for', not 'since'.

89. (e); No error.

90. (c); The possessive case of 'They' is 'their', so use 'their' in place of 'there'

91. (e); **92. (c);** **93. (b);**

94. (c); **95. (a);** **96. (a);**

97. (d); **98. (b);** **99. (d);**

100. (e);

REASONING ABILITY

Directions (1-5): Study the following information carefully and answer the questions given below:

Eight persons sit in a row such that some of them are facing in the north direction and some are facing in the south direction.
Note: No two adjacent persons are sitting according to the English alphabetical series for example, P is not an immediate neighbor of both O and Q, and so on.
C sits third from one of the extreme ends of the row. A sits third to the left of C. Only one person sits between A and B. Three persons sit between D and E. As many persons sit to the left of E as to the left of H. H faces north direction. Immediate neighbors of C face same direction. Persons sitting at the extreme end faces the same direction. G sits to the left of F. E faces opposite direction as A. Immediate neighbors of G faces the opposite direction. G does not face north direction.

1. How many persons sit between B and E?
(a) One (b) Two (c)Three
(d) Four (e) More than four

2. Who among the following sits third to the right of H?
(a) F (b) E (c) D
(d) G (e) A

3. Four of the following five are alike in a certain way and hence form a group which of the following does not belong to the group?
(a) FC (b) CH (c) GA
(d) DC (e) HE

4. How many persons face south direction?
(a) Four (b) Two (c) Three
(d) One (e) More than four

5. Which of the following statement is not true?
(a) H sits immediate left of E
(b) A sits between H and C
(c) D sits at an extreme end
(d) C sits immediate left of F.
(e) No one sits between A and G.

Directions (6-7): In each of the questions below. Some statements are given followed by conclusions/group of conclusions. You have to assume all the statements to be true even if they seem to be at variance from the commonly known facts and then decide which of the given conclusion given in the options logically follow from the information given in the statements:

6. Statements: Only a few paint is color. No color is fabric. Only a few fabric is enamel.
(a) Some fabric is paint
(b) All paint can be fabric
(c) All enamel can be color
(d) Some paint is enamel
(e) All color can be paint

7. Statements: Only a few brush is nail. Only a few home is buyer. Some buyer is nail.
(a) Some buyer is not nail.
(b) Some nail is not home
(c) All brush is buyer
(d) Some brush is not nail.
(e) All home can be buyer.

Directions (8-10): Digits in the number given in each of the following questions are to be coded based on the codes and the conditions given below:

Elements	V	7	#	T	&	U	2	E	A
Codes	1	@	n	9	h	*	f	!	$

Conditions:
I. If first element is even number and last element is symbol then the codes for both of them is interchanged.
II. If any vowel is preceded by an odd number then their codes will be code of the odd number.
III. If the first element is odd number and last element is consonant then their codes will be the code of the first element.
IV. If any consonant is succeeded by symbol then their codes will be the code of the symbol.
Note: In each case either no or one or more than one condition is followed.

8. What is the code for 27AU#?
(a) n@$fn (b) n@@*f (c) f@@*f
(d) f@@*n (e) n$@nf

9. What is the code for 7VU&A?
(a) @1*h$ (b) $1*h@ (c) $1*h$
(d) @1*h@ (e) None of these

10. What is the code for 7T&2V?
(a) @h9f@ (b) @hh@f (c) @hhf@
(d) 1h9f@ (e) 1h9f1

Directions (11-13): In each of the questions below. Some statements are given followed by conclusions/group of conclusions. You have to assume all the statements to be true even if they seem to be at variance from the commonly known facts and then decide which of the given conclusion given in the options logically follow from the information given in the statements:

11. Statements: Some nail is paint. Only a few paint is oil. All oil is dark.
(a) No dark is paint
(b) Some dark can be nail.
(c) Some paint can be dark.
(d) Some oil is nail.
(e) Some oil is not paint.

12. Statements: Only a few brush is wallet. All brush is money. Some money is enamel.
(a) Some enamel is wallet.
(b) Some money is not brush.
(c) All brush can be wallet.
(d) Some enamel is not money.
(e) All wallet can be brush.

13. Statements: No nail is pain. No body is pain. Only a few pain is arm.
(a) Some arm is body.
(b) Some body is nail.
(c) All nail can be arm.
(d) Some arm is not pain.
(e) All arm can be body.

14. Six persons A, B, C, D, E and F go to office on six different days of the week from Monday to Saturday. A go before Wednesday. Only two persons go between A and D. Three persons go between D and F. B goes after D. E goes before D but not immediately before D. In which of the following days C go to office?
(a) Monday (b) Tuesday (c) Wednesday
(d) Thursday (e) None of these

Directions (15-19): Study the following information carefully and answer the questions given below:
Eight persons A, B, C, D, E, F, G and H sits around a circular table facing towards the center of the table. All of them go to eight different cities.
Only one person sits between F and the one who go to Pune. Three persons sit between the one who go to Pune and the one who go to Mumbai. D sits third to the left of the one who go to Pune. The one who is from Chennai sits second to the right of D. Three persons sit between the one who go to Chennai and the one who go to Bengaluru. H sits second to the right of G. H go to Delhi. G sits third to the left of A. The one who go to Chandigarh sits third to the left of G. B sits immediate right of the person who go to Jaipur. C does not go to Mumbai and Kolkata. E does not go to Chandigarh.

15. Who among the following go to Chandigarh?
(a) A (b) C (c) D
(d) B (e) G

16. How many persons sit between A and G when counted from right of G?
(a) Two (b) Three (c) Four
(d) Five (e) One

17. Who among the following sits second to the left of the one who is from Chennai?
(a) G (b) A (c) D
(d) B (e) C

18. F go to which of the following city?
(a) Mumbai (b) Jaipur (c) Bengaluru
(d) Chennai (e) Kolkata

19. Which of the following is true regarding B?
(a) B sits immediate left of D
(b) B go to Chennai
(c) B sits third right of A.
(d) C is immediate neighbor of B.
(e) B go to Bengaluru.

Direction (20): Study the following information carefully and answer the questions given below:

There are six persons of different weights. Three persons are heavier than Rohan. Two person's weight is in between Sohan and Geeta. Rajesh is heavier than Rakesh but lighter than Ram. Neither Rakesh nor Geeta is lightest person. Weight of 2nd heaviest person is 66kg. Weight of all persons are in whole numbers.

20. What is the weight of Sohan?
(a) 67kg (b) 65kg (c) 64kg
(d) 63kg (e) 62kg

Direction (21-24): Study the following information carefully and answer the questions given below:
P@Q: It means that P is in East of Q
P#Q: It means that P is in West of Q
P$Q: It means that P is in North of Q
P%Q: It means that P is in South of Q
P(7)$Q means that P is 7m North of Q
P$@Q means that P is in North-east of Q
Paul and Raj are starting their journey from point V and U respectively and both reaches at point W as per the given information-
Paul- R(13)#V, S(8)%R, T(5)@S, X(4)%T, Y(10)#X, W(15)$Y
Raj- J(5)#U, K(11)$J, L(11)@K, M(4)$L, N(5)@M, W(10)%N

21. If point A(2)%R then, what is the direction and shortest distance of A with respect to U?
(a) A(15)$@U (b) A(16)@U (c) A(16)$@U
(d) A(15)@U (e) None of these

22. Which of the following is true?
(a) M$@X (b) U%@N (c) U#R
(d) J%#V (e) None is true

23. If B(5)@L and C(8)#W are true then, what is the shortest distance between B and C?
(a) 5m (b) 10m (c) 15m
(d) 20m (e) None of these

24. U is in which direction with respect to V?
(a) U$@V (b) U%@V (c) U%#V
(d) U#V (e) None is true

Direction (25-29): Study the following information carefully and answer the questions given below:

Eleven persons buy things one after another. Only five persons buy things after P. Three persons buy things between P and Q. R buy things after S and before T. There are as many persons buy things before U as after V. More than three persons buy things between W and X who buy things just after P. Y buy things before Z and after R. No one buy things after T. Y buy things just after V. U buys after Q.

25. Who among the following buy things between X and Z?
(a) U and Y (b) U and V (c) V and Y
(d) P and Y (e) None of these

26. Four of the following five are alike in certain way and hence form a group, find the one which does not belong to that group?
(a) QR (b) UX (c) WU
(d) XY (e) PY

27. Which of the following statement is true?
(a) R buy things before U
(b) More than two persons buy things before S
(c) No one buy things before Q
(d) P buy things after Z
(e) None is true

28. How many persons buy things between Y and R?
(a) Three (b) Five (c) Seven
(d) Four (e) None of these

29. Who among the following buy things just after U?
(a) Q (b) R (c) S
(d) T (e) None of these

Direction (30-32): Study the following information carefully and answer the questions given below:

A meaningful eight letter word is going to formed. No two letters of this word are same. There are three letters between S and N. C is 2nd to the left of U which is to the left of T. D is either at extreme left or at extreme right. There are at least two letters are between D and O which is immediate left of U. T is at immediate right of N. I is not at extreme end.

30. What is the position of I with respect to C?
(a) 3rd to the right (b) 3rd to the left (c) 2nd to the right
(d) 2nd to the left (e) None of these

31. Which of the following letter is 2nd from extreme left end?
(a) C (b) I (c) O
(d) U (e) None of these

32. Which of the following is true regarding I?
(a) I is not an immediate neighbor of D
(b) Three letters are between I and C
(c) S is at immediate left of I
(d) T is not at extreme end
(e) None is true

Direction (33-37): Study the following information carefully and answer the questions given below:

Eight persons were born at different months in different years i.e. 1983, 1984, 1985, 1986. Two persons were born in each year. Ages are measured from 1st January 2020. Every person was born on 1st of every month.
There are 11 months gap between the births of L and K. Q and L were born in the month of 30 days. J is younger than N. P and L were born in same year. O was born just before K who is youngest, and both were born in the month which have 31 days. M is not less than 37 year. There are as many persons were born before Q as after L. There are 17 months difference between the age of M and J. There are 13 months difference between the ages of P and O. P was born before April. N was born on October.

33. What is the age of Q?
(a) 35 years 7 months
(b) 35 years 8 months
(c) 35 years 9 months
(d) 36 years 3 months
(e) None of these

34. Who among the following was born on September 1985?
(a) N (b) M (c) O
(d) Q (e) None of these

35. Which of the following is true?
(a) N was born on June
(b) Q was born before the person who was born on September
(c) L was born before July
(d) Three persons were born between N and O
(e) None is true

36. Four of the following five are alike in certain way and hence form a group, find the one which does not belong to that group?
(a) M (b) N (c) J
(d) O (e) K

37. In which of the following month youngest person was born?
(a) March (b) May (c) June
(d) August (e) None of these

Direction (38-42): Study the following information carefully and answer the questions given below:

In a certain code language:
"group rate drive dare" is coded as "®£ $# ©¥ ©℗"
"nose final read less" is coded as "®¥ αμ %¥ Ω%"
"gear other mind most" is coded as "@¥ £& ®β Ω¥"

38. What is the code of "sure"?
(a) ©@ (b) &α (c) %£
(d) ¥€ (e) None of these

39. What may be the code of "green grass"?
(a) Ω© £℘ (b) Ω$ ℘© (c) ℘$ Ω©
(d) £℘ Ω$ (e) None of these

40. If "epic" is coded as "⊏Ω" then, what is the code of "care"?
(a) #$ (b) *& (c) @%
(d) ⊏℗ (e) None of these

41. Which of the following word may have code "&£"?
(a) Image (b) True (c) This
(d) Then (e) None of these

42. Which of the following may have the code "⊏Ω %©"?
(a) Night Match (b) Great Walk (c) Close Fight
(d) Nice Draw (e) None of these

Directions (43-47): In the following questions, the symbols @, #, $, % and & are used with the following meaning as illustrated below-
'P@Q' means 'P is neither smaller than nor equal to Q'
'P#Q' means 'P is neither greater than nor equal to Q
'P$Q' means 'P is neither smaller than nor greater than Q'
'P%Q' means 'P is not greater than Q'
'P&Q' means 'P is not smaller than Q'
Now in each of the following questions assuming the given statements to be true, find which of the three conclusions I, II and III given below them is/are **definitely true** and give your answer accordingly.

43. **Statement:** N@V$W, W%K#L, L%R
Conclusions: **I.** L@N **II.** K#R **III.** V%R
(a) Only I
(b) Both II and III
(c) Only I and II
(d) Only II
(e) All I, II, III

44. **Statement:** J#K&L, L@M$O, O@N%G
Conclusions: **I.** G&M **II.** K@O **III.** M@G
(a) Either I or III
(b) II and Either I or III
(c) Only I
(d) I and Either II or III
(e) Both I and II

45. **Statement:** N#M&L; L#J&O; O&V
Conclusions: **I.** M@N **II.** J#V **III.** L%N
(a) Only I (b) Only II (c) Both I and II
(d) Both II and III (e) None of these

46. **Statement:** A@B&D; D%E#F; H@G&D
Conclusions: **I.** D#A **II.** F@D **III.** H%E
(a) Both I and II (b) Only II (c) Both II and III
(d) Only I (e) All I, II, III

47. **Statements:** H#G; H#I&J; M#F%I
Conclusions: **I.** G%J **II.** F@H **III.** I@M
(a) Both I and II (b) Only I (c) Only III
(d) Both I and III (e) Only II

Directions (48-50): Each of the questions below consists of a question and two statements numbered as I and II given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read all the two statements and give answer.

48. Five persons live on a building of five floors. The ground floor is numbered as 1, floor just above is numbered as 2 and so on till the topmost floor which is numbered as 5. On which floor X lives?
I. A lives above 3rd floor. Two persons live between X and Y. X lives above A.
II. Two persons live between X and Y. X lives just above C. Y lives below X.
(a) Only I
(b) Only II
(c) Either I or II
(d) Neither I nor II
(e) Both I and II

49. What is the direction of L with respect to O?
I. A is 10m north of L. M is 25m north of L. B is 10m south of O.
II. M is 5m west of B. A is 15m south of M. L is 10m south of A.
(a) Either I or II (b) Only II (c) Both I and II
(d) Only I (e) Neither I nor II

50. Five students P, Q, W, S and V have different heights. Who is the tallest person among them?
I. P is taller than Q, but he is not the tallest. Q is shorter than W.S is shorter than V.
II. Only three persons are shorter than P. Q is shorter than P and V. W is taller than S.
(a) Only II (b) Neither I nor II (c) Only I
(d) Either I or II (e) Both I and II

QUANTITATIVE APTITUDE

Directions (51–56): Read the data carefully and answer the questions.

There are 3 colleges A, B, C offering 3 courses mechanical engineering (ME), chemical engineering (CE) & electrical engineering (EE).
College A: Number of students in ME is 40 less than that of in EE and number of students in CE is 50% more than that of in ME.
College B: Number of students in EE is 20 less than that of in EE in college A. Number of students in CE is 340 which is 40 more than that of in CE in college A. Number of students in EE is $22\frac{2}{9}$% more than that of in ME.
College C: Number of students in ME is 40% less than that of in ME in college A. Number of students in CE is 40 less than that of in ME.
Total students in EE in all colleges together are 780.

51. How many students are in college C?
(a) 620 (b) 740 (c) 560
(d) 680 (e) 520

52. If 10% students of ME course from college A shifted to CE course in college C, then what is the difference between total number of students in CE in college C now and average of students in ME in all colleges now?
(a) 60 (b) 380 (c) 260
(d) 80 (e) 180

53. Number of students in EE in college B are what percent more/less than number of students in ME in college C ?
(a) 75% (b) $87\frac{1}{3}$% (c) $83\frac{1}{3}$%
(d) $66\frac{2}{3}$% (e) 50%

54. What is the ratio of total number of students in ME & CE together in college A to total number of students in CE & EE together in college B?
(a) 23 : 27 (b) 25 : 28 (c) 26 : 25
(d) 25 : 26 (e) 27 : 28

55. What is the difference between average of total number of students in EE in all colleges and average of total number of students in CE in all colleges?
(a) 30 (b) 60 (c) 40
(d) 20 (e) 50

56. Total students in college C are what percent of total students in college A ? (approx.)
(a) 79% (b) 70% (c) 100%
(d) 73% (e) 85%

57. A shopkeeper sets MRP of a product such that after giving 10% discount, he earns 12.5% profit. What will be his profit/loss percent if he allows a discount of 25%?
(a) 5% (b) 10.45% (c) 8.33%
(d) 6.25% (e) 9.09%

58. A alone can fill a tank in 16 mins and B alone can fill the same tank in 'X' mins. C alone can empty the tank in 12 mins. A, B, and C together take $34\frac{2}{7}$ min to fill the tank. What is the time taken by B alone to fill the tank?
(a) 12 min (b) 16 min (c) 20 min
(d) 24 min (e) 18 min

59. A container contain 96 litre mixture of milk and water out of which 35% is water. 20 lit of mixture is taken out and 10 litre milk & 16 litre water are added in remaining mixture. Find the difference between quantity of milk and water in the final mixture after replacement.
(a) 15.4 lit (b) 16.8 lit (c) 18.2 lit
(d) 21.4 lit (e) 19.8 lit

60. Train A having length 180 m crosses a platform thrice of its length in 36 sec. Train B having speed of 63 kmph crosses a standing man in 8 sec. find the time taken by both trains to cross each other when running in same direction.
(a) 100 sec (b) 120 sec (c) 128 sec
(d) 64 sec (e) 92 sec

Directions (61-66): Given table shows the total number of boys & girls in a class in 5 different years and percentage of boys & girls who participated in an event and percentage of total students who did not participate in event. Some data are missing which you have to calculate as per the information provided in question. Read the data carefully and answer the questions.

Year	Total number of Boys & Girls in class	% of boys participated in event	% of girls participated in event	% of (boys + girls) not participated in event
2015	---	65	---	30
2016	360	---	25	15
2017	180	25	---	25
2018	300	---	80	10
2019	---	45	---	40

61. If there are 20% more students in 2019 as compared to previous year and number of girls who didn't participate in 2019 are 12, then what is the difference between no. of boys who participated in 2019 and total students who didn't participate in 2016?
(a) 68 (b) 54 (c) 72
(d) 44 (e) 84

62. Find ratio of no. of students who didn't participate in 2017 to no. of boys who participated in 2018 if all boys participated in 2018?
(a) 3 : 10 (b) 13 : 10 (c) None of these
(d) 5 : 8 (e) 7 : 10

63. If average of total no. of students in 2015, 2016 & 2017 is 260 and 23 girls didn't participate in 2015, then find the difference between no. of boys and girls who participated in 2015?
(a) 6 (b) 36 (c) 42
(d) 14 (e) 26

64. Find average no. of students who didn't participate in 2016, 2017 & 2018.
(a) 39 (b) 44 (c) 41
(d) 46 (e) 43

65. If ratio of total boys to total girls in 2018 is 3 : 2, then boys who didn't participate in 2018 are what percent of total girls who participated in 2018?
(a) $16\frac{2}{3}\%$ (b) 25% (c) $6\frac{1}{4}\%$
(d) 5% (e) $8\frac{1}{3}\%$

66. If there are 200 boys in class in 2019 and number of girls who didn't participate in 2019 is 5 more than no. of students who didn't participate in 2017 then what is the ratio of no. of girls who participated in 2019 to total students who participated in 2018?
(a) 5 : 9 (b) Cannot be determined
(c) 20 : 27 (d) 5 : 8 (e) 5 : 6

Directions (67–68): Read the information carefully and answer the questions.

A and B started a business by investing Rs 6000 & Rs 12000 respectively. A left business after 'X' months and at same time C joined B with Rs 7000. At the end of year, ratio of their profit share (A : B : C) is 18 : 48 : Z.

67. Find 'X'.
(a) 8 (b) 6 (c) 9
(d) 7 (e) 10

68. Find value of Z.
(a) 27 (b) 18 (c) 24
(d) 21 (e) 15

69. Present age of Father and mother is in ratio of 12 : 11 and after 12 years, this ratio becomes 15 : 14. Age of father is 22 years more than his son and age of mother is 20 years more than that of her daughter. Find sum of present age of son & daughter.
(a) 54 yrs (b) 48 yrs (c) 52 yrs
(d) 46 yrs (e) 50 yrs

70. Difference between total CI and total SI on a certain sum at 20% per annum for 2 years is Rs 420. What will be the simple interest earned on same sum at 25% per annum for 3 years?
(a) Rs 5725 (b) Rs 7875 (c) Rs 6525
(d) Rs 7000 (e) Rs 7375

Directions (71-75): What approximate value should come in place of question mark (?) in following questions. You are **not** expected to calculate the exact value.

71. $40.05 \div 4.89 + ? = 72.93 - 18.95$
(a) 36 (b) 42 (c) 52
(d) 46 (e) 58

72. $9.87 \times 16.08 - 55.03 \div 10.92 = ? + 54.98$
(a) 100 (b) 115 (c) 85
(d) 92 (e) 108

73. $63.08 + 67.98 - 43.11 + ? = 89.93$
(a) 6 (b) 15 (c) 2
(d) 11 (e) 17

74. $79.87 + 23.06 = 12.98 \times 7.13 + ?$
(a) 2 (b) 21 (c) 7
(d) 17 (e) 12

75. $520.07 \div 13.02 - 3.89 \times 10.09 + 33.88 = ?$
(a) 39 (b) 34 (c) 29
(d) 25 (e) 45

76. A and B invested Rs 6000 and Rs 12000 respectively in a business. After 6 months, C joined them and B left after 9 months from the starting. If profit share of C at the end of one year is Rs. 18900 out of total profit which is Rs. 50400, then find amount invested by C?
(a) Rs 18000 (b) Rs 15000 (c) Rs 17000
(d) Rs 16000 (e) Rs 14000

77. The area of a square is 1767 m^2 (approx.) and length of rectangle is one-third of side of that square. If breadth of rectangle is 4m less than length of rectangle, then find difference between area of square and area of rectangle.
(a) 1609 m^2 (b) 1627 m^2 (c) 1664 m^2
(d) 1729 m^2 (e) 1709 m^2

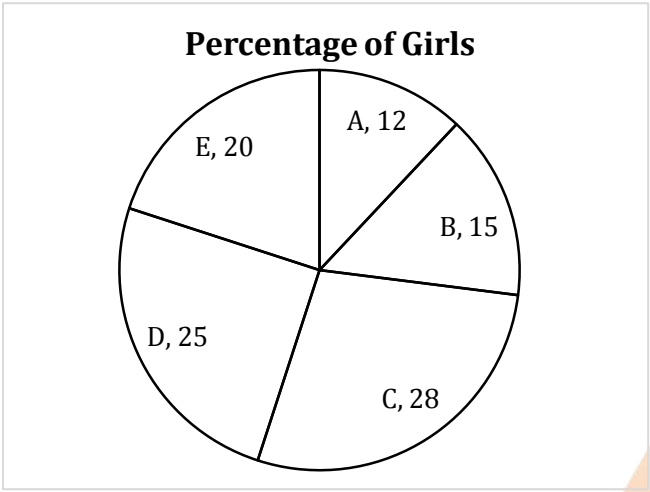
78. A person sold an article for Rs 802. If it is sold for Rs 38 more, then selling price would be 20% more than cost price. What is the profit percent when article is sold at actual selling price?
(a) 18.75% (b) 16.67% (c) 20%
(d) $11\frac{1}{9}\%$ (e) $14\frac{4}{7}\%$

79. A boat takes 4 hrs to cover 'D' km in upstream and takes 3 hours to cover 'D-2' km in downstream. If speed of stream is 2 kmph, then find distance covered by boat in upstream in 3 hrs.
(a) 44 km (b) 48 km (c) 42 km
(d) 56 km (e) 54 km

80. A dice is rolled twice what is the probability that the number in the second roll will be lesser than that in the first?
(a) $\frac{1}{4}$ (b) $\frac{1}{2}$ (c) $\frac{7}{12}$
(d) $\frac{5}{12}$ (e) $\frac{1}{6}$

Direction (81–86): Study the following data carefully and answer the following questions.

The pie chart shows the percentage distribution of total girls in five different classes in March month of 2019 and table shows the percentage of boys more or less than the girls in respective class for the same month and year.



CLASS	% of boys more/less than girls
A	50% More
B	30% More
C	25% Less
D	24% More
E	25% More

81. What is the central angle for the percentage distribution of girls in class C?
(a) 100.8° (b) 100.0° (c) 102.8°
(d) 98.8° (e) 90.8°

82. In April 2019, number of girls and boys in class C are increased by $14\frac{2}{7}\%$ and $33\frac{1}{3}\%$ respectively as compared to previous month. Total students in class C in April 2019 are what percent more or less than total students in class C in March 2019 ?
(a) $25\frac{2}{7}\%$ (b) $24\frac{2}{7}\%$ (c) $28\frac{4}{7}\%$
(d) $30\frac{2}{7}\%$ (e) $28\frac{2}{7}\%$

83. What is the ratio of number of boys in class B to number of boys in class E?
(a) 33 : 50 (b) 39 : 49 (c) 44 : 47
(d) 37 : 40 (e) 39 : 50

84. What is the average of number of boys in class A, D and E if number of boys in class B are 195?
(a) $245\frac{2}{3}$ (b) $240\frac{2}{3}$ (c) $236\frac{2}{3}$
(d) $241\frac{2}{3}$ (e) $246\frac{2}{3}$

85. If the difference between boys and girls in class D are 216, then what is the sum of boys in class A and girls in class C?
(a) 1656 (b) 1545 (c) 1600
(d) 1664 (e) 1520

86. Total students in class B are what percent more/less than total students in class E ?
(a) $27\frac{8}{9}\%$ (b) $27\frac{5}{9}\%$ (c) $25\frac{7}{9}\%$
(d) $25\frac{5}{9}\%$ (e) $23\frac{1}{3}\%$

Direction (87-91): Following are the questions based on two statements and answer the following based on the given statements.

87. C alone can complete the work in 15 days. In what time C and A together can complete the whole work.
Statement I. A is 25% more efficient than B and B alone can complete the work in 20 days
Statement II. Difference between the time taken by A alone and B alone to complete the work is $22\frac{1}{2}$ days and time taken by C alone to finish the work is 10% more than the time taken by A and B together to complete the work.
(a) Statement I alone is sufficient to answer the question while statement II alone is not sufficient to answer the question
(b) Statement II alone is sufficient to answer the question while statement I alone is not sufficient to answer the question
(c) Both statements I and II together are required to answer the question.
(d) Either the statement I alone or Statement II alone is sufficient to answer the question
(e) Question cannot be answered from any of the given statements or from both the statements.

88. Side of square is 'a' cm. Find the value of 'a' ?
Statement I. Square is inscribed in a circle C1. Radius of circle C1 is 21cm.
Statement II. Circle C2 is inscribed in the square. Radius of circle C2 is 28cm.
(a) Statement I alone is sufficient to answer the question while statement II alone is not sufficient to answer the question
(b) Statement II alone is sufficient to answer the question while statement I alone is not sufficient to answer the question
(c) Both statements I and II together are required to answer the question.
(d) Either the statement I alone or Statement II alone is sufficient to answer the question
(e) Question cannot be answered from any of the given statements or from both the statements.

89. A boat covers 35 km in upstream and 35km in downstream in total 4 hours. In what time it will cover 50km upstream?

Statement I. Sum of upstream and downstream speed of the boat is 36km/h

Statement II. Speed of water current is 20% of speed of boat in still water.

(a) Statement I alone is sufficient to answer the question while statement II alone is not sufficient to answer the question

(b) Statement II alone is sufficient to answer the question while statement I alone is not sufficient to answer the question

(c) Both statements I and II together are required to answer the question.

(d) Either the statement I alone or Statement II alone is sufficient to answer the question

(e) Question can not be answered from any of the given statements or from both the statements.

90. A train crosses a platform of twice of its length in 48seconds. Find the speed of train?

Statement I. Train crosses a man walking at a speed of 4m/s in the same direction as the direction of the train in 20 seconds

Statement II. After covering half of the platform, due to fault in the engine it covers remaining distance at a speed of which is 60% of its initial speed.

(a) Statement I alone is sufficient to answer the question while statement II alone is not sufficient to answer the question

(b) Statement II alone is sufficient to answer the question while statement I alone is not sufficient to answer the question

(c) Both statements I and II together are required to answer the question.

(d) Either the statement I alone or Statement II alone is sufficient to answer the question

(e) Question cannot be answered from any of the given statements or from both the statements.

91. Let x be total number of balls in a bag. Balls are of three different colors i.e. black, white and red. Calculate (x-1).

Statement I. Probability of getting a black ball is ⅙, a red ball is ⅙ & a white ball is ⅔.

Statement II. If one white ball is lost, probability of not getting a white ball is 8/23 and initial number of white balls in bag is less than 27.

(a) Statement I alone is sufficient to answer the question but statement II alone is not sufficient to answer the question.

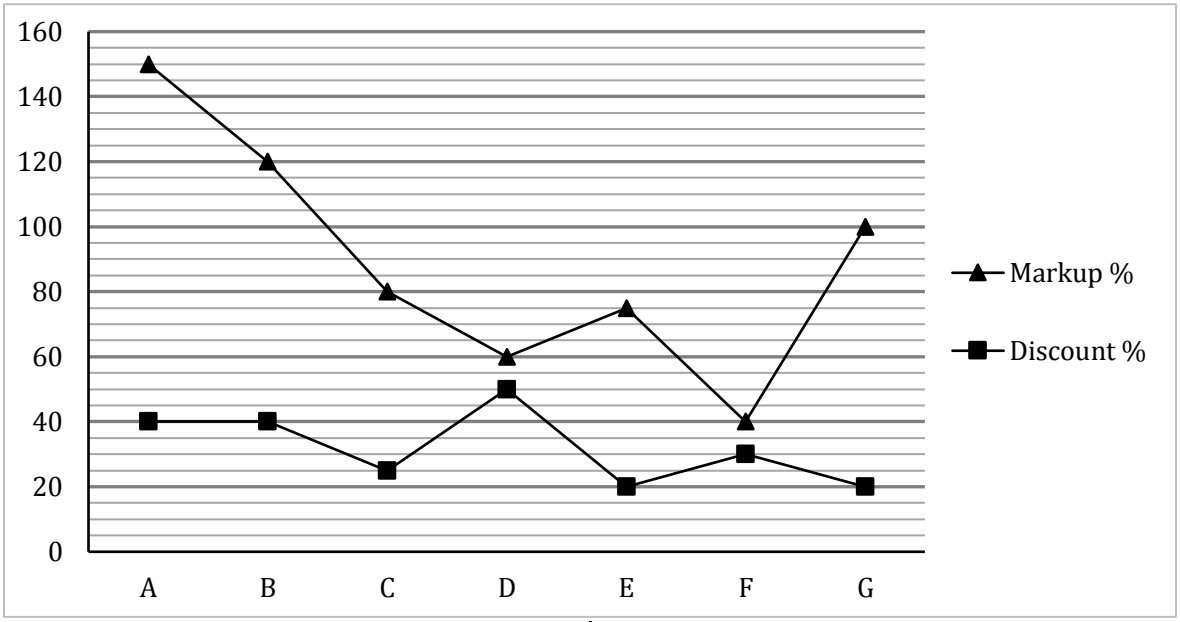
(b) Statement II alone is sufficient to answer the question but statement I alone is not sufficient to answer the question.

(c) Both the statements taken together are necessary to answer the questions, but neither of the statements alone is sufficient to answer the question.

(d) Either statement I or statement II by itself is sufficient to answer the question.

(e) Statements I and II taken together are not sufficient to answer the question.

Direction (92–97): Line chart given below shows markup percent more than CP and discount percent given on MRP of seven different articles sold by a shopkeeper. Study the data carefully and answer the following questions.



92. Cost price of article D is Rs.320. If article D is sold at 20% profit rather than marking up and giving discount, then find the difference between the selling price obtained in both cases. (in Rs.)
(a) 120 (b) 128 (c) 90
(d) 144 (e) 165

93. If difference between selling price and cost price of article G is Rs.150, then find the selling price of article G.
(a) Rs. 300 (b) Rs. 420 (c) Rs. 350
(d) Rs. 250 (e) Rs. 275

94. If selling price of article B is same as selling price of article E, then cost price of article B is what percent more than cost price of article E ?
(a) $7\frac{2}{33}\%$ (b) $9\frac{2}{33}\%$ (c) $5\frac{2}{33}\%$
(d) $4\frac{2}{33}\%$ (e) $6\frac{2}{33}\%$

95. What is the ratio of marked price to selling price of article C?
(a) 4 : 3 (b) 3 : 4 (c) 4 : 7
(d) 7 : 4 (e) 4 : 5

96. Total selling price of article A and article B together is what percent more than the marked price of article G ? (It is given that cost price of all articles are same)
(a) 48% (b) 42% (c) 41%
(d) 45% (e) 47%

97. Cost price of article 'B' is Rs.100 more than Cost price of article 'C' and marked price of article 'B' is Rs.260 more than marked price of article 'C'. Find the difference between selling price of article B and article C ?
(a) Rs. 128 (b) Rs. 124 (c) Rs. 136
(d) Rs. 180 (e) Rs. 156

98. Difference of speed of boat in downstream and upstream is 7km/hr and the time taken by the boat to travel 45 km in downstream is 80 minutes more than the time taken to travel 13 km in upstream. Due to cyclone, speed of current becomes twice and thus it can cover D km in upstream in time which is equal to new speed of current. Find D? (**Note:** speed of boat in still water is multiple of 5)
(a) 30 (b) 24 (c) 18
(d) 21 (e) 27

99. Ravi and Sneha got married 10 years ago and at that time ratio of their ages was 5:4. Ratio of present age of Ravi and Sneha is 7:6. After marriage they had seven children including a triplet and a twin. The ratio of present age of triplet, twin, sixth and the seventh child is 4:3:2:1. Find the largest possible value of the present total age of the family.
(a) 121 (b) 107 (c) 101
(d) 93 (e) None of the above

100. Shivam invested Rs 3 lac in a scheme which is providing interest rate of 'r'% per annum at CI and this scheme doubles the sum invested in $\frac{72}{r}$ years which is two times of rate of interest provided by the scheme. Find the total amount received by Shivam at the end of 48 years (in lac)?
(a) 45 (b) 50 (c) 64
(d) 32 (e) 48

ENGLISH LANGUAGE

Directions (101-106): Read the following passage and answer the following questions. Some words are highlighted to help you answer some of the questions.

AI has several positive applications but the capability of AI systems to learn from experience and to perform autonomously for humans makes AI the most disruptive and self-transformative technology of the 21st century. If AI is not regulated properly, it is bound to have unmanageable implications. Imagine, for instance, the electricity supply suddenly stops while a robot is performing a surgery, and access to a doctor is lost? And what if a drone hits a human being? These questions have already confronted courts in the U.S. and Germany. All countries, including India, need to be legally prepared to face such kind of disruptive technology.

Predicting and analysing legal issues and their solutions, however, is not that simple. For instance, criminal law is going to face drastic challenges. What if an AI-based driverless car gets into an accident that causes harm to humans or damages property? Who should the courts hold liable for the same? In the U.S., there is a lot of discussion about regulation of AI. Germany is working on blemish present in it, like certain ethical rules for autonomous vehicles stipulating that human life should always have priority over property or animal life. China, Japan and Korea are following Germany in developing a law on self-driven cars. In India, NITI Aayog released a policy paper, 'National Strategy for Artificial Intelligence', in June 2018, which considered the importance of AI in different sectors. The Budget 2019 also proposed to launch a national programme on AI. While all these developments are taking place on the technological front, no comprehensive legislation to regulate this growing industry has been formulated in the country till date.

Apart from these aspects, strategists have also offered sober explorations of the future relationship between AI and nuclear weapons. Some of the most widely received **musings** on the issue, including a recent call for an AI-enabled "dead hand" to update America's aging nuclear command, control, and communications infrastructure, tend to obscure more than they _____ due to an insufficient understanding of the technologies involved. An appreciation for technical detail, however, is necessary to arrive at realistic assessments of any new technology, and particularly consequential where nuclear weapons are concerned. Some have warned that advances in AI could erode the fundamental logic of nuclear deterrence by enabling counter-force attacks against heretofore concealed and mobile nuclear forces. Such secure second-strike forces are considered the backbone of effective nuclear deterrence by assuring retaliation. Were they to become vulnerable to pre-emption, nuclear weapons would lose their deterrent value.

The exponential growth of sensors and data sources across all warfighting domains has analysts today facing an overabundance of information. Some strategists warn that the same AI-infused capabilities that allow for more prompt and precise strikes against time-critical conventional targets could also undermine deterrence stability and increase the risk of nuclear use. Specifically, AI-driven improvements to intelligence, surveillance, and reconnaissance would threaten the survivability of heretofore secure second-strike nuclear forces by providing technologically advanced nations with the ability to find, identify, track, and destroy their adversaries' mobile and concealed launch platforms. Transporter-erector launchers and ballistic missile submarines, traditionally used by nuclear powers to enhance the survivability of their deterrent forces, would be at greater risk. A country that acquired such an exquisite counter-force capability could not only hope to limit damage in case of a spiraling nuclear crisis but also negate its adversaries' nuclear deterrence "in one swift blow." Such an ability would undermine the nuclear deterrence calculus whereby the costs of imminent nuclear retaliation far outweigh any conceivable gains from aggression.

101. In accordance with the passage which of the following statement(s) negates the advancement of the AI technology?
(a) AI would diminish the whole idea of having a nuclear deterrence in the first place
(b) Absence of international monitoring authority for AI would lead to unbridled use
(c) Non-existence of jurisdictional responsibility of use of AI
(d) Both (a) and (c)
(e) None of these

102. Which of the following argument(s) can be rectified after reading the given passage?
(a) Machine intelligence is much different from human intelligence
(b) AI-improved counter-force capability would be considered as good enough to order a strike
(c) Use of AI in National security will make the conventional warfare strategies obsolete.
(d) AI is considered to be inanimate that holds the producer of the product liable for harm
(e) None of these.

103. Which of the following is similar to '**MUSINGS**' as used in the passage?
(a) contemplation (b) decimate (c) nurture
(d) tickle (e) None of these.

104. 'No comprehensive legislation to regulate this growing industry has been formulated in the country till date' Why?
(a) dearth of technical whereabouts of the AI based mechanism in the concerned authorities
(b) dual use of AI i.e. both military and non-military.
(c) owing to political benefits of mass surveillance
(d) Both (b) and (c)
(e) None of these.

105. Select appropriate filler for the blank given in the passage.
(a) discard (b) flout (c) embellish
(d) illuminate (e) None of these.

106. Which of the following suggestions regarding improvement of the AI have been suggested in the passage?
(a) Agreeing with the legal as well psychological aspects in different situations
(b) Ability to prioritize in life threatening situations
(c) prone to various manipulation that can alter decision making ability
(d) safeguard from hacking various malicious groups and organization
(e) None of these.

Directions (107-111): In the following questions a sentence is provided which is divided in different parts. One of these parts is highlighted and is free from grammatical error. Remaining parts may or may not be grammatically or contextually correct. Choose the letter corresponding to the correct part as your answer.

107. Noting Kathak exponent Manjari Chaturvedi **(A)**/is in for a shock when her **(B)/qawwali performance was stopped midway/** by officials of the Uttar Pradesh government during **(C)**/a official cultural programme at a Lucknow **(D)**
(a) D (b) A (c) B
(d) C (e) No Error

108. In a fortnight, about 30 peoples will **(A)**/join the National Cyber Forensic Lab to **(B)/assist security agencies in preventing,**/ containing and investigate complex **(C)**/cybercrimes along the country**(D)**
(a) D (b) A (c) B
(d) C (e) No Error

109. The fourth edition of 'The Death Penalty in India: Annual Statistics' **(A)**/published by Project 39A of NLU-Delhi said **(B)/the number of death sentences awarded/** for murders involving sexual offences**(C)/** in 2019 was at the highest in four years**(D)**
(a) D (b) A (c) B
(d) C (e) No Error

110. The NGT have warned that local **(A)/ bodies will be liable to pay/** a compensation of Rs. 1 millions per month **(B)**/for a population of above 1 million if there was **(C)**/continued failure to treated generated waste. **(D)**
(a) D (b) A (c) B
(d) C (e) No Error

111. Under the NDPS Act, if there was prior**(A)/** information about the recovery of narcotic drugs**(B)/** or psychotropic substances to any person**(C)/** the power of arrest such a person**(D)/ is not vested with the police officer.**
(a) D (b) A (c) B
(d) C (e) No Error

Directions (112-117): Read the following passage and answer the following questions. Some words are highlighted to help you answer some of the questions.

The sweetest victory is the one that's most difficult. The one that requires you to reach down deep inside, to fight with everything you've got, to be willing to leave everything out there on the battlefield—without knowing, until that do-or-die moment, if your heroic effort will be enough. Society doesn't reward defeat, and you won't find many failures documented in history books. The exceptions are those failures that become steppingstones to later success. Such is the case with Thomas Edison, whose most memorable invention was the light bulb, which purportedly took him 1,000 tries before he developed a successful prototype. "How did it feel to fail 1,000 times?" a reporter asked. "I didn't fail 1,000 times," Edison responded. "The light bulb was an invention with 1,000 steps."

Unlike Edison, many of us avoid the prospect of failure. In fact, we're so focused on not failing that we don't aim for success, settling instead for a life of _____. When we do make missteps, we **gloss** over them, selectively editing out the miscalculations or mistakes in our life's résumé. "Failure is not an option," NASA flight controller Jerry C. Bostick reportedly stated during the mission to bring the damaged Apollo 13 back to Earth, and that phrase has been etched into the collective memory ever since. To many in our success-driven society, failure isn't just considered a non-option—it's deemed a deficiency, says Kathryn Schulz, author of Being Wrong: Adventures in the Margin of Error. "Of all the things we are wrong about, this idea of error might well top the list," Schulz says. "It is our meta-mistake: We are wrong about what it means to be wrong. Far from being a sign of intellectual inferiority, the capacity to err is crucial to human cognition."

When we take a closer look at the great thinkers throughout history, a willingness to take on failure isn't a new or extraordinary thought at all. From the likes of Augustine, Darwin and Freud to the business mavericks and sports legends of today, failure is as powerful a tool as

any in reaching great success. "Failure and defeat are life's greatest teachers [but] sadly, most people, and particularly conservative corporate cultures, don't want to go there," says Ralph Heath, managing partner of Synergy Leadership Group and author of Celebrating Failure: The Power of Taking Risks, Making Mistakes and Thinking Big. However, in today's post-recession economy, some employers are no longer shying away from failure—they're embracing it. According to a recent article in BusinessWeek, many companies are deliberately seeking out those with track records reflecting both failure and success, believing that those who have been in the trenches, survived battle and come out on the other side have irreplaceable experience and perseverance.

When the rewards of success are great, embracing possible failure is key to taking on a variety of challenges, whether you're reinventing yourself by starting a new business or allowing yourself to trust another person to build a deeper relationship. "To achieve any worthy goal, you must take risks," says writer and speaker John C. Maxwell. "One of the biggest secrets to success is operating inside your strength zone but outside of your comfort zone," Heath says. Although you might fail incredibly, you might succeed incredibly—and that's why incredible risk and courage are requisite. Either way, you'll learn more than ever about your strengths, talents and resolve, and you'll strengthen your will for the next challenge. If this sounds like dangerous territory, it can be. But there are ways to ease into this fearless mindset.

112. As per the passage, what is common in all of the struggles which are later documented in the books?
(i) Efforts made throughout the struggles
(ii) Never give up attitude
(iii) Success at the end of their journey
(a) Only (i)
(b) Only (iii)
(c) Both (ii) and (iii)
(d) Both (iii) and (i)
(e) All of these.

113. Which of the following statement(s) is/are not true in context of the given passage?
(a) High rewarding challenges require similar adaptability to varied failure possibility.
(b) As per Heath, risk taking ability is must to achieve any worthy goal
(c) Both (a) and (d)
(d) Human generally learn from the mistakes they make and the experience from those mistakes
(e) None of these.

114. Which of the following best describe the attitude of Thomas Edison as can be inferred from the second paragraph of the given passage?
(a) distressed (b) sedulous (c) tense
(d) indifferent (e) None of these.

115. Which of the following statement(s) can be inferred from the given passage?
(a) History is filled with the stories of eminent person and their failures.
(b) Positive attitude is the key to tackle a problematic situation
(c) Recession have made the people to take failure positively
(d) Mangers have to stick their necks out a mile every day to get the job done
(e) None of these.

116. Select appropriate filler for the blank given in the passage.
(a) supremacy (b) abundant (c) mediocrity
(d) distinction (e) None of these.

117. Which of the following is opposite in meaning to '**GLOSS**' as used in the passage?
(a) unveil (b) facade (c) shimmer
(d) conceal (e) None of these.

Directions (118-120): In the following questions, a paragraph is given which is provided with some blanks. These blanks have to be filled by one word from the options provided below. Choose the option which fills all the blanks without inducing any grammatical or contextual error.

118. We are witnessing unprecedented _____ in India. Such _____ are the hallmark of a free, democratic society, whose logic demands that the voice of the people be heard by those in power and decisions be reached after proper discussion and consultation.
(a) fastenings (b) protests (c) growth
(d) debate (e) None of these.

119. There could be more bad news on the _____ front which saw a five-year high of 7.35% in December. The report from SBI said core _____ could rise further on the back of telecom price increase and a larger increase could push headline _____ closer to 8%.
(a) diplomatic (b) economic (c) democratic
(d) inflation (e) None of these.

120. A bag containing a/an _____, placed near a ticket counter at the Mangaluru International Airport, triggered alarm on Monday morning. The bag was later removed and the _____ defused through controlled explosion in an open area one kilometre away.
(a) ornament (b) confliction (c) explosive
(d) cash (e) None of these.

Directions (121-125): Read the following passage and answer the following questions. Some words are highlighted to help you answer some of the questions.

Coffee first arrived in Europe from the Muslim world during the 17th century. It was amazing and it amazed, with an exoticness that charmed Europeans, its stimulating

effect and the fact that it made a welcome change from traditional alcoholic beverages. Establishments serving coffee began to open, providing an environment for wonderful social, cultural and political exchange and, within a century, coffee had become part of everyday life.

It is not known exactly when coffee as a drink was discovered. However, we do know that the coffee plant originated in Ethiopia, where coffee beans were consumed either as a paste or as a drink, for their medicinal properties. The shrub was introduced to Yemen around the 14th century and it was then that the first coffee plantations were created. Muslim mystics and pilgrims appreciated coffee for its energising powers, so it travelled to Mecca. From that moment onwards, its success became unstoppable, bowling over Cairo, the Middle East and Constantinople, before arriving in Europe in the early 17th century. As expected, this new drink would come up against a few opponents. Religious clerics were suspicious and asked Pope Clement VIII to taste it. He allegedly declared that it would be a sin if only unbelievers were allowed to enjoy such a delicious drink. Like the pope, the privileged classes were charmed by coffee and quickly **embraced** its exoticism; 'turqueries' were particularly fashionable at that time. Intellectuals appreciated it for its ability to help one stay alert and to think clearly. Unlike chocolate, which remained a luxury for the privileged for a long time, coffee, which was less-expensive, was adopted by all levels of society and welcomed into homes during the 19th century. A morning cup of coffee gradually replaced traditional broths or soups and became established as a great classic.

The arrival of coffee was accompanied by a new trend as establishments serving coffee, just like the ones that existed in Constantinople and in Cairo, began to open all over Europe. They soon became meeting places, where people from a variety of backgrounds could get together, discuss and exchange ideas, without becoming intoxicated. In Paris, for example, Le Procope became a meeting place for artists and intellectuals - Montesquieu and Diderot were regular customers. The freedom of speech and the spirit of revolt which sometimes reigned in these establishments did not go unnoticed by the authorities. In London, cafés came to be considered dangerous and, in 1676, Charles II ordered their closure. However, as a result of public pressure, they reopened just a few days later.

What we call the coffee bean is actually more like a seed or pit it grows inside a thin-fleshed fruit not unlike a cherry, which ripens about nine months after the coffee plant flowers. In order to prepare the beans for roasting, they must first be removed from this outer casing using one of several techniques—a "washed," a "pulp natural," or a "natural" method—which may vary based on factors like regional climate, tradition, and the coffee's intended flavor profile. This can be a very tricky part of the life cycle of a coffee bean, as even the highest-quality crop can quickly be _____ by mold, over-drying, inattentiveness, bad weather, or pest infestation.

121. Which of the following statement(s) is/are false in context of the given passage?
(a) Coffee leads to the rise of establishments which sometimes served as the origin of revolt.
(b) Coffee was first discovered in Ethiopia in middle eastern region of world.
(c) Both (b) and (d)
(d) Popularity of coffee around the world started from Europe.
(e) None of these.

122. Which of the following is similar in meaning to the word '**EMBRACED**' as used in the passage?
(a) repudiate (b) espouse (c) obviate
(d) renounce (e) None of these.

123. Which of the following merits of the coffee have been mentioned in the passage?
(i) Energizing affects
(ii) Increased alertness
(iii) improved ability to think clearly
(a) Only (i)
(b) Only (ii)
(c) Only (iii)
(d) Both (ii) and (iii)
(e) All of the above

124. Select appropriate filler for the blank given in the passage.
(a) augmented (b) ruined (c) exhausted
(d) replenished (e) None of these.

125. Which of the following statement(s) is/are in accordance with the passage?
(a) Use of coffee faced severed criticism from religious clerics
(b) widespread use of coffee helped chocolate in gaining popularity
(c) coffee fruit is grinded and roasted to obtain the coffee powder which is widely used
(d) Both (a) and (b)
(e) None of these.

Directions (126-130): In the following questions five sentences which are in their jumbled form are given. Further these sentences have a highlighted part which may or may not form a contextually meaningful sentence. You have to swap the highlighted part with the other to make a contextually meaningful sentence and then rearrange those sentences to make a contextually meaningful paragraph. Later, answerer the follow up questions.

(A) Here, the example of Brazil, the only country where more than 100 million **most ambitious government health programme(i)**.

(B) Achieving universal health coverage is a very complex task, **one interesting field of cooperation to**

explore in the strategic partnership is healthcare(ii).

(C) It can also provide lessons for Ayushman Bharat, currently the world's largest and **inhabitants have a universal health system, is worth studying(iii).**

(D) As Brazilian President Jair Bolsonaro visits New Delhi this Republic Day, **especially for developing countries(iv)**.

(E) Which in turn will Help in achieving universal coverage in India, a country with a population of 1.3 billion, **is a challenge of epic proportions(v)**.

126. Which of the following will be the second sentence after the rearrangement?
(a) C (b) A (c) E
(d) B (e) D

127. Which of the following highlighted phrase should the phrase '**especially for developing countries**' interchanged with to make a contextually meaningful sentence?
(a) most ambitious government health programme
(b) one interesting field of cooperation to explore in the strategic partnership is healthcare
(c) inhabitants have a universal health system, is worth studying
(d) is a challenge of epic proportions
(e) No interchange required.

128. Select the correct pair of replacement from the options given below.
(a) i-ii (b) iii-iv (c) ii-iii
(d) i-iii (e) None of these.

129. Which of the following will be the fifth sentence after the rearrangement?
(a) C (b) A (c) E
(d) B (e) D

130. Which of the following will be the fourth sentence after the rearrangement?
(a) C (b) A (c) E
(d) B (e) D

Directions (131-138): In the following passage there are highlighted words, each of which has been numbered. These numbers are printed below the passage and against each, five options are given. In four options, one word is suggested in each option. Find out the appropriate word which can replace the highlighted word. If the highlighted word fits the passage, choose option 'e' (No correction required) as the correct choice.

The Supreme Court allowed the government's **abrogation (131)** to take over the management of the **thriving (132)** real estate major Unitech Ltd. and appointed a new board of directors to steer the completion of pending projects and provide homes for over 12,000 investors in dire straits. A Bench of Justices D.Y. Chandrachud and M.R. Shah appointed former IAS officer Yudvir Singh Malik as the chairman and managing director of the new board while refusing to give a/an **vacant (133)** on the board to Unitech Group founder Ramesh Chandra at this stage.

"The idea of a professional board is to allow them to take control of the company and complete the pending projects in the interest of homebuyers," the court said. The board includes A.K. Mittal, ex-CMD of National Buildings Construction Corporation; Renu Sud Karnad, chairman of HDFC Credila Finance Service Pvt Ltd.; Jitu Virwani, CMD of Embassy Group; and Niranjan Hiranandani, managing director of Mumbai-based Hiranandani Group.

The court **subjugated (134)** the institution of any fresh cases against Unitech for two months. Old orders and enforcement of them also stand suspended for the period. Unitech promoters Sanjay Chandra and his brother Ajay Chandra are currently **granted (135)** in Tihar jail for allegedly **laying (136)** off homebuyers' money. The court said the probe into irregularities in the company would continue and said the work of a panel led by former Delhi High Court judge, Justice S.N. Dhingra, appointed to sell the company's assets and use the money in completion of pending projects, would continue to work till the new board comes up with a **resolution (137)** framework.

The court indicated that it would appoint a retired Supreme Court judge to monitor the preparation of resolution framework. The top court directed the present management of the company, forensic auditors, asset reconstruction companies, banks and financial institutions and state governments to **intend (138)** cooperation to the new board.

131. (a) inception (b) character (c) adoption
(d) proposal (e) No correction required

132. (a) juvenile (b) embattled (c) sprouting
(d) endangered (e) No correction required

133. (a) rite (b) abash (c) berth
(d) ramification (e) No correction required

134. (a) barred (b) adjourned (c) incurred
(d) discord (e) No correction required

135. (a) entitled (b) coveted (c) lodged
(d) melee (e) No correction required

136. (a) taken (b) called (c) pay
(d) siphoning (e) No correction required

137. (a) journal (b) intrinsic (c) luscious

(d) novice (e) No correction required

138. (a) disseminate (b) extend (c) squander
(d) plummet (e) No correction required

Direction (139-140): Select the phrase/ connector (STARTERS) from the given three options which can be used to form a single sentence from the two sentences given below, implying the same meaning as expressed in the statement sentences.

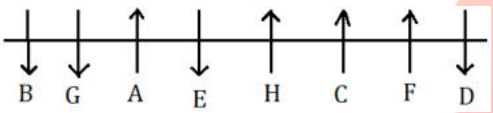
139. China will step up efforts to contain the coronavirus outbreak ahead of the Lunar New Year holidays. 17 new cases of the virus have been confirmed and there is increasing possibility of spread of virus to other countries.
(i) In lieu of 17 new cases…
(ii) Owing to the 17 new cases….
(iii) Taking into consideration China's efforts to….
(a) Only (i)
(b) Only (ii)
(c) Only (iii)
(d) Both (i) and (ii)
(e) None of the above

140. Doubts were raised about the efficacy of the Right To Information Act in Haryana. Only 35% penalty has been recovered since the setting up of the Haryana State Information Commission in 2006.
(i) Citing the modus operandi of RTI……
(ii) Stating the facts regarding cases under RTI….
(iii) In what raises doubts about the efficacy…….
(a) Only (i)
(b) Only (ii)
(c) Only (iii)
(d) Both (iii) and (i)
(e) None of the above

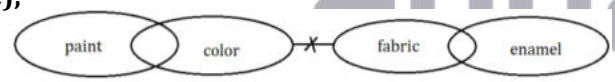
Solutions

REASONING ABILITY

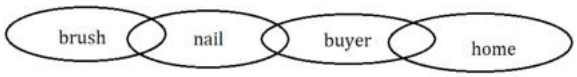
Solutions (1-5):



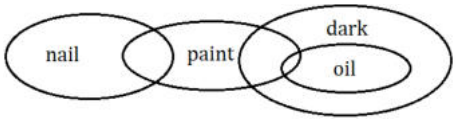
1. (b); 2. (c); 3. (d);
4. (a); 5. (b);
6. (e);



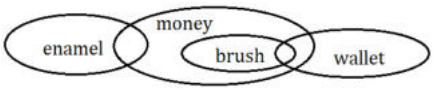
7. (d);



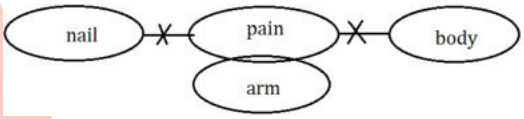
8. (b); Condition I and II is applied.
9. (a); No Condition is applied.
10. (c); Condition III and IV is applied.
11. (b);



12. (e);



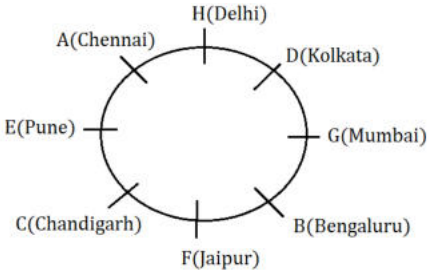
13. (c);



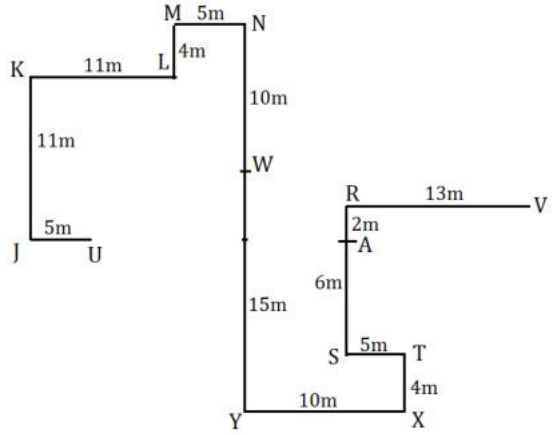
14. (d);

Days	Persons
Monday	F
Tuesday	A
Wednesday	E
Thursday	C
Friday	D
Saturday	B

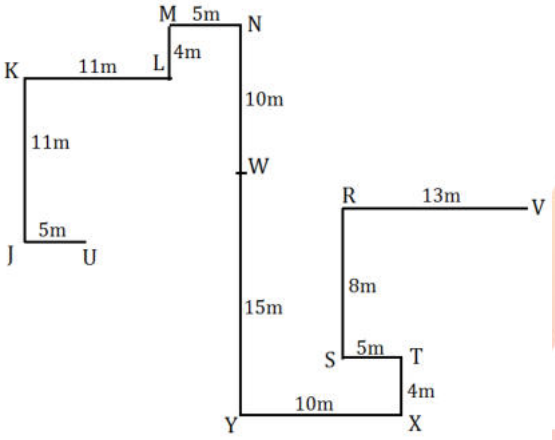
Solutions (15-19):



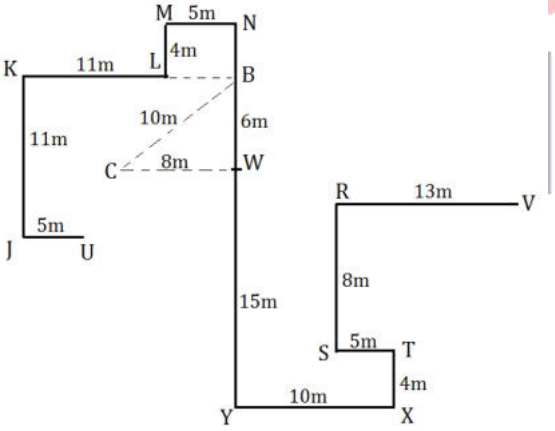
15. (b); 16. (a); 17. (c);
18. (b); 19. (e);
20. (e); All weights are in whole number so
Ram > Rajesh > Geeta > Rohan > Rakesh > Sohan
66kg 65kg 64kg 63kg 62kg
21. (b);



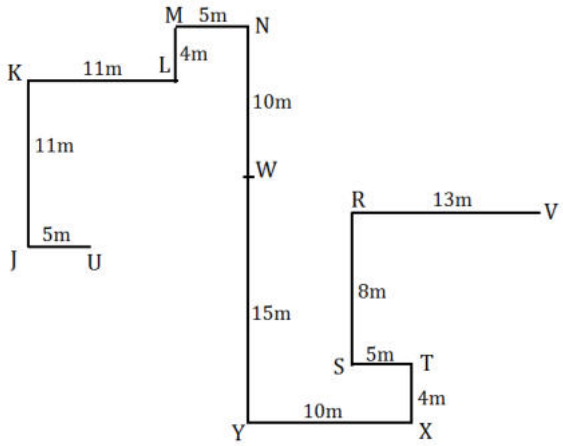
22. (d);



23. (b);



24. (c);



Solution (25-29):

W
Q
S
U
R
P
X
V
Y
Z
T

25. (c); **26. (d);** **27. (e);**

28. (a); **29. (b);**

Solution (30-32): Meaningful word is DISCOUNT

30. (d); **31. (b);** **32. (e);**

Solution (33-37): O was born just before K who is youngest. M is not less than 37 year. Ages are measured from 1st January 2020. Every person was born on 1st of every month. So, M was born on January 1983 and he is oldest person. There are 17 months difference between the age of M and J. So, J was born on June 1984. Here, we get two possibilities i.e. Case 1 and Case 2. There are as many persons were born before Q as after L. P and L were born in same year. J is younger than N. N was born on October.

	Case 1		Case 2	
Years	Months	Persons	Months	Persons
1983	January	M	January	M
	October	N	October	N
1984	June	J		Q
		Q	June	J
1985		L		P
		P		L
1986		O		O
		K		K

P was born before April. So, P was either born on February or on March. O and K were born in the month which have 31 days. There are 13 months difference between the ages of P and O. Now P and O were born on February and March respectively. Q and L were born in the month of 30 days. L was born before P in same year and here P was born on February, so Case 1 is ruled out. There are 11 months gap between the births of L and K. Now, L and K was born on September and August respectively.
So, the final arrangement will be: -

Years	Months	Persons
1983	January	M
	October	N
1984	April	Q
	June	J
1985	February	P
	September	L
1986	March	O
	August	K

33. (c); 34. (e); 35. (b);

36. (c); 37. (d);

Solution (38-42): Logic- Each word has code which consists only two symbols.
1st symbol is the code of the number which is the difference between the place values of 1st and last letter in each word.
2nd symbol is the code of the number which is the difference between the place values of 2nd letter from right and 2nd letter from left.
Code of difference of place values is as follows:

difference	1	2	3	4	5	6	7	8	9	10
code	©	⊏	£	¥	β	α	Ω	μ	®	€

difference	11	12	13	14	15	16	17	18	19
code	@	℘	$	%	&	*	Ⓟ	∞	#

38. (c); 39. (b); 40. (d);

41. (b); 42. (c);

43. (d); **I.** L@N(false) **II.** K#R(true)
III. V%R(false)

44. (b); **I.** G&M(false) **II.** K@O(true)
III. M@G(false)

45. (a); **I.** M@N(true) **II.**J#V(false)
III. L%N(false)

46. (a); **I.** D#A (true) **II.** F@D(true)
III. H%E(false)

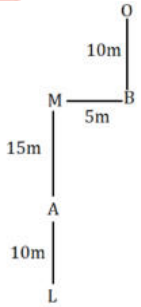
47. (c); **I.** G%J (false) **II.** F@H(false)
III. I@M(true)

48. (a); From I we get following arrangement:

Floor	Persons
5	X
4	A
3	
2	Y
1	

Hence X lives on 5th floor.

49. (c); From I and II both we get following arrangement:



Thus, L is in south-west of O.

50. (b); Even after combining I and II we can't conclude anything.

QUANTITATIVE APTITUDE

Solutions (51–56): College A: let no. of students in ME = 2x
Students in EE = 2x + 40
Students in CE = 3x
College B: students in EE = 2x + 20
Students in CE = 340 = 40 + 3x
Students in ME = $\frac{9}{11}(2x + 20)$
College C: students in ME = 1.2x
Students in CE = 1.2x – 40
Students in EE = 780 – (2x+40+2x+20) = 720 – 4x
On solving, x = 100

College \ Course	ME	CE	EE	Total
A	200	300	240	740
B	180	340	220	740
C	120	80	320	520

51. (e); students in C = 520

52. (a); students who shifted to CE in college C from ME in college A = 20
Students in CE in college C now = 80+20 = 100

Average of students in ME of all colleges
$= \frac{180 + 180 + 120}{3} = 160$
Required difference = $160 - 100 = 60$

53. (c); required % = $\frac{220-120}{120} \times 100 = 83\frac{1}{3}\%$

54. (b); required ratio = (200 + 300) : (340 + 220)
= 500 : 560 = 25 : 28

55. (d); required difference = $\frac{240+220+320}{3} \sim \frac{300+340+80}{3}$
= 20

56. (b); required % = $\frac{520}{740} \times 100 = 70\%$ (approx.)

57. (d); Let MP be Rs 100x
SP = Rs 90x
CP = $\frac{100}{112.5} \times 90x =$ Rs 80x
New SP = Rs 75x
Required loss % = $\frac{5x}{80x} \times 100 = 6.25\%$

58. (c); ATQ, $\frac{1}{16} + \frac{1}{X} - \frac{1}{12} = \frac{7}{240}$
On solving, $\frac{1}{X} = \frac{1}{20}$
X = 20 min

59. (b); milk remained after 20 lit mixture is taken out
$= (96 - 20) \times \frac{65}{100} = 49.4$ lit
Water remained after 20 lit mixture is taken out
$= (96 - 20) \times \frac{35}{100} = 26.6$ lit
Required difference = (49.4 + 10) – (26.6 + 16)
= 16.8 litre

60. (c); Speed of train A = $\frac{4\times180}{36} = 20$ m/s = 72 kmph
Length of train B = $63 \times \frac{5}{18} \times 8 = 140$ m
Required time = $\frac{180+140}{(72-63)\times\frac{5}{18}} = 128$ sec

61. (b); Total student in 2019 = 360
Let no. of boys & girls be x & y respectively
x + y = 360 ……..(i)
Students who didn't participate in 2019
$= \frac{40}{100} \times 360 = 144$
no. of boys who didn't participate in 2019
= 144 – 12 = 132
required difference = $\frac{132}{55} \times 45 - \frac{15}{100} \times 360 = 54$

62. (a); no. of girls who didn't participate in 2018 = 30
No. of boys who participated in 2018
$= 300 - \frac{30}{20} \times 100 = 150$
Required ratio = 45 : 150 = 3 : 10

63. (d); no. of students in 2015 = 780 – (360+180) = 240
Students who didn't participate in 2015 = 72
no. of boys who didn't participate in 2015 = 49
Total number of girls in 2015 = $240 - \frac{49}{35} \times 100$
= 100
Required difference = $140 \times \frac{65}{100} - (100 - 23)$
= 91 – 77 = 14

64. (e); required average
$= \frac{1}{3}\left(360 \times \frac{15}{100} + 180 \times \frac{25}{100} + 300 \times \frac{10}{100}\right)$
= (54 + 45 + 30)/3 = 43

65. (c); Total no. of boys in 2018 = 180
Total No. of girls in 2018 = 120
No. of students who didn't participate in 2018
= 30
No. of boys who didn't participate in 2018
= 30 – 24 = 6
Required % = $\frac{6}{120-24} \times 100 = 6\frac{1}{4}\%$

66. (a); no. of boys who didn't participate in 2019 = 110
No. of girls who didn't participate in 2019
$= 5 + \frac{25}{100} \times 180 = 50$
Total students in 2019 = $\frac{160}{40} \times 100 = 400$
No. of girls who participated in 2019 = 200 – 50
= 150
Required ratio = $150 : (\frac{90}{100} \times 300) = 5 : 9$

Solutions (67–68): Ratio of Profit share (A : B : C)
= (6000 × X) : (12000 ×12) : (7000 × X) = 6X : 144 : 7X
ATQ, 6X : 144 : 7X = 18 : 48 : Z
$\frac{6X}{144} = \frac{18}{48}$
X = 9 months
Also, $\frac{144}{7X} = \frac{48}{Z} \Rightarrow Z = 21$

67. (c); X = 9 months

68. (d); Z = 21

69. (e); Let present age of father & mother be 12x years & 11x years respectively
ATQ, $\frac{12x + 12}{11x + 12} = \frac{15}{14} \Rightarrow x = 4$
present age of son = 12x – 22 = 26 yrs
present age of daughter = 11x – 20 = 24 yrs
required sum = 50 yrs

70. (b); let sum be Rs P
ATQ, $P\left(\frac{20}{100}\right)^2 = 420$
P = Rs 10500
Required simple interest = $\frac{10500\times25\times3}{100}$ = Rs 7875

71. (d); $40 \div 5 + ? \approx 73 - 19$
? = 46

72. (a); $10 \times 16 - 55 \div 11 \approx ? + 55$
? = 100

73. (c); $63 + 68 - 43 + ? \approx 90$
? = 2

74. (e); $80 + 23 \approx 13 \times 7 + ?$

? = 12

75. (b); $520 \div 13 - 4 \times 10 + 34 \approx ?$
? = 34

76. (a); let amount invested by C be Rs X
Profit share ratio = A : B : C
= 6000 × 12 : 12000 × 9 : X × 6
= 12000 : 18000 : X
ATQ, $\frac{X}{30000+X} \times 50400 = 18900$
x = Rs 18000

77. (b); side of square = 42 m (area of square ≈ 1764 m^2)
length of rectangle = 14 m
breadth of rectangle = 10 m
Required difference = 1767 – 140 = 1627 m^2

78. (e); let CP be Rs x
ATQ, $\frac{120}{100} \times x = 802 + 38$
x = Rs 700
required profit % = $\frac{802-700}{700} \times 100 = 14\frac{4}{7}\%$

79. (c); Let speed of boat in still water be s kmph
ATQ, $\frac{D}{4} = s - 2$
D = 4s – 8 .....(i)
Also, $\frac{D-2}{3} = s + 2$
D = 3s + 8 .....(ii)
From (i) & (ii);
S = 16 kmph
Required distance = 3(16 – 2) = 42 km

80. (d); When dice is rolled two times
Total number of possibilities = 36 (i.e. 6^2)
Desired possibilities = ${}^6C_2 \times 1$
(i.e. two number are selected for two rolls)
1 No. of way to arrange number in descending orders.
∴ Required probability = $\frac{{}^6C_2}{36} = \frac{5}{12}$

81. (a); Required central angle → $\frac{360}{100} \times 28 = 100.8°$

82. (c); Let total girls in class C in March 2019 be 28x
Number of girls class C in April 2019
$= \left(1 + \frac{1}{7}\right) \times 28x = 35x$
Number of boys in class C in March 2019
$= \frac{(100-25)}{100} \times 28x = 21x$
Number of boys in class C in April 2019
$= \left(1 + \frac{1}{3}\right) \times 21x = 28x$
Required percentage = $\frac{35x+28x-28x-21x}{28x+21x} \times 100$
$= \frac{14}{49} \times 100 = 28\frac{4}{7}\%$

83. (e); Let number of girls in class B be 15x and number of girls in class E be 20x
Number of boys in class B = $\frac{(100+30)}{100} \times 15x = \frac{39x}{2}$
Number of boys in class E = $\frac{(100+25)}{100} \times 20x = 25x$
Required ratio = $\frac{39}{2\times25} = 39:50$

84. (e); Let number of girls in class A, B, D and E be 12 x, 15x, 25x and 20x respectively.
ATQ, $\frac{(100+30)}{100} \times 15x = 195$
$15x = \frac{1950}{13} \Rightarrow x = 10$
Number of boys in class A = $\frac{(100+50)}{100} \times 12x = 18x$
Number of boys in class D = $\frac{(100+24)}{100} \times 25x = 31x$
Number of boys in class E = $\frac{(100+25)}{100} \times 20x = 25x$
Required average
$= (18 + 31 + 25) \times \frac{10}{3} = 246\frac{2}{3}$

85. (a); Let girls in class D be 25x then boys in D will be 31x
So, 6x = 216 ⇒ x = 36
Boys in class A = $12x \times \frac{150}{100} = 18x$
Girls in class C = 28x
Required sum = 18x +28x= 46 × 36 = 1656

86. (e); Let total girls in class B and class E be 15x and 20x respectively
Total boys in class B = 19.5x
Total boys in class E = 25x
Required percentage = $\frac{45x-34.5x}{45x} \times 100 = 23\frac{1}{3}\%$

87. (d); **From I –**
Ratio of efficiency of A to B is 5 : 4
So,
Ratio of time taken by A : B is 4 : 5
From I we can calculate the time taken by A alone to complete the work
Hence statement I alone is sufficient to answer the question
From II –
From II we can say that either A takes more time than B or vice versa.
Let A takes $(x+\frac{45}{2})$ days and B takes x days. So, time taken by A and B together to complete the work will be = $15 \times \frac{10}{11}$ days
ATQ, $\frac{2}{2x+45} + \frac{1}{x} = \frac{11}{150}$
from here x can be calculated and we can find the value of time taken by A alone to complete the work.
We can find the answer from either statement I alone or statement II alone.

88. (d); **From I –**
Radius of circle C1 is half the diagonal of square.
So, we can find side of square from statement I alone.

From II – Diameter of circle C2 is equal to side of square. So, we can find side of square from statement II alone.
Hence, Either statement I alone or statement II alone is sufficient to answer the question.

89. (d); It is given that $\frac{35}{x-y}+\frac{35}{x+y}=4$

From I – We get the value of x from first statement so on putting the value of x in the above equation we obtain value of y.
So, we can find the value of required time from statement I alone.

From II – $\frac{x}{y}=\frac{5}{1}$

On putting the value of x/y in the equation we obtain value of x and y.
So from statement II alone we can find the value of the required time.
So, from each statement individually we can find the value of required time.

90. (a); Let length of train be x meter so length of platform will be 2x meter
So, speed of train (in m/s) = $\frac{3x}{48}$

From I – ATQ, $\frac{x}{\frac{3x}{48}-4}=20$

So, x can be calculated from I and hence speed of train can be calculated.

From II – Statement II gives information only about percentage decrease in speed. We can not calculate speed of train because no information is given about time.
So statement I alone is sufficient to answer the question while statement II alone is not sufficient to answer the question.

91. (b); From I –

Probability of getting a black ball is = ⅙

Let there are 'a' black balls & '6a' total balls
Similarly red balls= 'a'
Probability of getting a while ball = ⅔ = 4/6
There will be 4a white balls.
x = 6a
But it can't be solved further.

From II –

Probability of getting a white balls = $1-\frac{8}{23}=\frac{15}{23}$

Let here 15 m white balls and 23 m total remaining balls after 1 white ball is lost
And 23m + 1 = x
15m + 1 is initial number of white balls
15 m is multiple of 15, it could be
15, 30, 45….
But it is given that initial number is less than 27.
Therefore initial number of balls is 15m + 1 = 16 balls, and now 15 balls are remaining. Hence 23
m = x – 1
Put m=1
x=24 balls
Hence it can be answered from (ii) alone.

92. (b); Selling Price after marking up and Discount given $= 320\times\frac{100+60}{100}\times\frac{50}{100}=256$ Rs.
Selling Price when direct 20% profit is obtained $= 320\times\frac{120}{100}=384$ Rs.
Required difference in selling price = 384 - 256 = 128 Rs.

93. (d); Let cost price of article G be Rs. 'x'
Selling price of article G = $x\times\frac{200}{100}\times\frac{80}{100}=1.6x$ Rs.
ATQ, $1.6x-x=150 \Rightarrow x=$ Rs.250

94. (e); Let cost price of article B and article E be Rs. 'x' and Rs. 'y' respectively
So, according to question
$\frac{220x}{100}\times\frac{3}{5}=\frac{175y}{100}\times\frac{4}{5}$
On solving, $\frac{x}{y}=\frac{35}{33}$
Required Percentage $=\frac{2}{33}\times100=6\frac{2}{33}\%$

95. (a); Let CP of article C = 100x
MRP of article C = 180x
SP of article C = $180x\times\frac{3}{4}=135x$
Required ratio $=\frac{180x}{135x}=4:3$

96. (c); Let cost price of all the articles is same i.e. 100x
So,
Selling price of A and B together
$=250x\times\frac{3}{5}+220x\times\frac{3}{5}=150x+132x=282x$
MRP of article G = 200x
Required Percentage $=\frac{282x-200x}{200x}\times100=41\%$

97. (e); Let cost price of article C be 100a
So, cost price of article B will be 100a + 100
Marked Price of article C will be 180a
Marked price of article B 180a + 260
According to question,
$(100a+100)\times\frac{220}{100}=180a+260$
$220a+220=180a+260$
a = 1
Selling Price of B $=(180a+260)\times\frac{3}{5}=$ Rs. 264
Selling Price of article C $=180a\times\frac{3}{5}=$ Rs. 108
Required difference = $264-108=$ Rs.156

98. (d); Let the speed of boat in still water be x km/hr and that of speed of current be y km/hr
ATQ

$x + y - (x - y) = 7$
$y = 3.5$ km/hr
$\frac{45}{x+3.5} - \frac{13}{x-3.5} = \frac{80}{60}$
x =10 & 14 (14 is neglected because x should be multiple of 5)
$\therefore$ $x = 10$ km/h
New speed of current = 7 km/hr
Distance travelled in upstream $= 7 \times (10 - 7)$
= 21 km

99. (b); Let present age Ravi and Sneha be 7x and 6x years respectively
ATQ
$\frac{7x-10}{6x-10} = \frac{5}{4}$
$x = 5$
Present age of Ravi=35 yr
And present age of Sneha=30yr
For maximum value of present total age of the family
Present age of triplet=8 yr
Present age of twins=6 yr
Present age of sixth child=4 yr
And present age of seventh child= 2yr
Maximum present age of that family
$= 35 + 30 + 8 \times 3 + 6 \times 2 + 4 + 2$
= 107 yr

100. (e); Here,
$\frac{72}{r} = 2r$
$r = 6\%$ p. a.
Time in which invested sum becomes double of itself= 12 years
ATQ
$6,00,000 = 3,00,000\left[1 + \frac{r}{100}\right]^{12}$
$\left[1 + \frac{r}{100}\right]^{12} = 2$……(i)
Required amount= $3,00,000\left[1 + \frac{r}{100}\right]^{48}$
$= 3,00,000 \times (2)^4$=48 lac

ENGLISH LANGUAGE

101. (d); Evidence in support of the given answer can be found from the following statements 'What if an AI-based driverless car gets into an accident that causes harm to humans or damages property? Who should the courts hold liable for the same?' and 'Some have warned that advances in AI could erode the fundamental logic of nuclear deterrence by enabling counter-force attacks against heretofore concealed and mobile nuclear forces.' From the given statements, both option (a) and (c) can be inferred clearly. Hence, the correct answer choice would be option (d)

102. (c); Evidence in support of the given argument can be found in the following statement 'AI-driven improvements to intelligence, surveillance, and reconnaissance would threaten the survivability of heretofore secure second-strike nuclear forces by providing technologically advanced nations with the ability to find, identify, track, and destroy their adversaries' mobile and concealed launch platforms.' Also, only option (c) can be inferred from the given passage and hence, the appropriate answer choice.

103. (a); Musing means giving a careful thought for a long period of time
Contemplation means think deeply and at length.
Decimate means kill, destroy, or remove a large proportion of.
Nurture means care for and protect
So, going through the meaning of the given words it can be clearly seen that the correct answer choice would be option (a)

104. (e); Going through the passage no appropriate reason for absence of regulation can be stated. Hence, the correct answer choice would be option (e).

105. (d); Discard means a thing rejected as no longer useful or desirable.
Flout means openly disregard
Embellish means make (a statement or story) more interesting by adding extra details that are often untrue
Illuminate means help to clarify or explain
Going through the given sentence and the meaning of the given words it can be clearly seen that the correct answer choice would be option (d)

106. (b); From the given options, only (b) is mentioned in the passage. Evidence in support of the given argument can be found from the following statement 'Germany is working on blemish present in it, like certain ethical rules for autonomous vehicles stipulating that human life should always have priority over property or animal life.' From the given statement option (b) can be inferred clearly and hence the correct answer choice would be option (b).

107. (d); In part (A), usage of 'noting' is incorrect instead it should be 'noted' which means well known; famous. In part (B), use of 'is' is incorrect instead it should be 'was' as the given sentence is in past tense as can be seen from the usage of 'was' in the highlighted part. In part (D), usage of article 'a' is incorrect instead it should be 'an'. So, only part (C) is free from any grammatical error. Hence, the correct answer choice would be option (d)

108. (c); In part (A), use of 'peoples' is incorrect because 'people' has both singular and plural sense in it, so there is no need to add 's' to make it plural. In part (C), instead of 'investigate' is should be 'investigating' as per the rule of parallelism and in part (D), instead of 'along' it should be 'around' the country. So, only part (B) is free from any error. Hence, the correct answer choice would be option (c)

109. (e); There is no grammatical error in the given sentence. Hence, the correct answer choice would be option (e).

110. (d); In part (A), instead of 'have' it should be 'has' because 'NGT' is singular. In part (B), instead of 'millions' we should use 'million' because we don't add 's' when we given exact number and in part (D), instead of 'treated' it should be 'treat'. So, only part (C) is free from error. Hence, the correct answer choice would be option (d).

111. (c); In part (A), instead of 'was' it should be 'is' as the given sentence is in present tense as can be seen from the highlighted part. In part (C), instead of 'to' it should be 'from' and in part (D), instead of 'of' it should be 'to'. So, only (B) is free from any error. Hence, the correct answer choice would be option (c)

112. (b); Evidence in support of the given answer can be found in the last line of the first paragraph in which it is stated 'Society doesn't reward defeat, and you won't find many failures documented in history books.' From the given statement it can be clearly seen that the world will only appreciate your efforts if you achieve success at the end or the efforts lead to success. Hence, the correct answer choice would be option (b)

113. (b); From the given statements, only option (b) is incorrect. Given argument can be justified from the following sentence from the passage "To achieve any worthy goal, you must take risks," says writer and speaker John C. Maxwell. Remaining options are true as per the passage. Hence, the correct answer choice would be option (b)

114. (b); Distressed means suffering from extreme anxiety, sorrow, or pain.
Sedulous means showing dedication and diligence.
Tense means unable to relax because of nervousness
Indifferent means having no particular interest or sympathy
So, going through the meaning of the given words it can be clearly seen that the appropriate answer choice would be option (b)

115. (c); Evidence in support of the given argument can be found from the following statement 'However, in today's post-recession economy, some employers are no longer shying away from failure—they're embracing it.' Also, there are inadequate facts present to justify the remaining options. Hence, the correct answer choice would be option (c)

116. (c); Taking hint from the contrasting structure of the sentence it can be clearly seen that the correct filler for the given blank should be 'mediocrity'. Hence, the correct answer choice would be option (c)

117. (d); Gloss means try to conceal or disguise (something unfavourable) by treating it briefly or representing it misleadingly.
Unveil means show or announce publicly for the first time
Façade means a deceptive outward appearance.
Shimmer means shine with a soft, slightly wavering light.
Conceal means prevent (something) from being known
Going through the meaning of the given words it can be clearly seen that the appropriate answer would be option (d)

118. (b); Fastening means a device that closes or secures something
Going through the meaning of the given words and taking hint from the use of helping verb 'are' after second blank, the appropriate filler for the given blank to make the given sentences both grammatically and contextually correct would be option (b)

119. (d); From the given options, only 'inflation' can fit all the blanks to make grammatically and contextually meaningful sentences. Hence, the correct answer choice would be option (d)

120. (c); From the given options, only 'explosive' can be used to fill the given blanks to make the given sentences both grammatically as well as

contextually meaningful. Hence, the correct answer choice would be option (c)

121. (d); From the given options, statement in option (d) is incorrect. Evidence supporting given argument can be found in the following sentences 'The shrub was introduced to Yemen around the 14th century and it was then that the first coffee plantations were created. Muslim mystics and pilgrims appreciated coffee for its energising powers, so it travelled to Mecca. From that moment onwards, its success became unstoppable, bowling over Cairo, the Middle East and Constantinople, before arriving in Europe in the early 17th century.' Hence, the correct answer choice would be option (d)

122. (b); From the given options, only 'espouse' is similar in meaning to the given word, remaining are its antonym. Hence, the correct answer choice would be option (b)

123. (e); All of the given advantages of the coffee have been mentioned in the passage as can be seen from the following statement 'Muslim mystics and pilgrims appreciated coffee for its energising powers, so it travelled to Mecca. Intellectuals appreciated it for its ability to help one stay alert and to think clearly.' Hence, the correct answer choice would be option (e)

124. (b); Going through the given sentence it can be clearly seen that the appropriate filler for the given blank would be 'ruined'. Hence, the correct answer choice would be option (b)

125. (c); From the given options, only statement (c) is against the facts mentioned in the passage. Evidence in support of the given argument can be found from the following statement 'What we call the coffee bean is actually more like a seed or pit it grows inside a thin-fleshed fruit not unlike a cherry, which ripens about nine months after the coffee plant flowers.' Hence, the correct answer choice would be option (c)

126. (d); First part of sentence (A) is providing the example of Brazil and sentence (C) is talking about the Ayushman Bharat. Taking hint from the use of 'world's largest' in sentence (C) and example of Brazil in (A) it can be clearly seen that the highlighted part of the both sentences can be interchanged to make a contextually meaningful sentence. Also, going through the first part of sentence (B) and (D) we can get an idea that the highlighted parts of these two can be interchanged to make a meaningful sentence. However, in sentence (E) no interchange is required. Now for the rearrangement of the sentences thus formed take hint from the starting of the sentences. From the given sentences, only (D) is the appropriate choice for the first sentence. Next in arrangement would be (B) as can be seen from the use of 'partnership in healthcare' in (D). Fact stated in (B) is further supported by providing example of Brazil in sentence (A), so it will be next sentence in arrangement. Sentence (A) then will be followed by (C) and (E) to make a contextually meaningful paragraph. So, the final arrangement is **DBACE.**

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(B) as can be seen from the use of 'partnership in healthcare' in (D). Fact stated in (B) is further supported by providing example of Brazil in sentence (A), so it will be next sentence in arrangement. Sentence (A) then will be followed by (C) and (E) to make a contextually meaningful paragraph. So, the final arrangement is **DBACE.**

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130. (a); First part of sentence (A) is providing the example of Brazil and sentence (C) is talking about the Ayushman Bharat. Taking hint from the use of 'world's largest' in sentence (C) and example of Brazil in (A) it can be clearly seen that the highlighted part of the both sentences can be interchanged to make a contextually meaningful sentence. Also, going through the first part of sentence (B) and (D) we can get an idea that the highlighted parts of these two can be interchanged to make a meaningful sentence. However, in sentence (E) no interchange is required. Now for the rearrangement of the sentences thus formed take hint from the starting of the sentences. From the given sentences, only (D) is the appropriate choice for the first sentence. Next in arrangement would be (B) as can be seen from the use of 'partnership in healthcare' in (D). Fact stated in (B) is further supported by providing example of Brazil in sentence (A), so it will be next sentence in arrangement. Sentence (A) then will be followed by (C) and (E) to make a contextually meaningful paragraph. So, the final arrangement is **DBACE.**

131. (d); Inception means the establishment or starting point of an institution or activity.
Adoption means the action or fact of choosing to take up, follow, or use something.
Proposal means a plan or suggestion, especially a formal or written one
Going through the meaning of the given words it can be clearly seen that the correct answer choice would be option (d)

132. (b); Juvenile means childish; immature.
Embattled means involved in or prepared for war
Sprouting means appear or develop suddenly and in large numbers.
Endangered means seriously at risk of extinction.
Going through the meaning of the given words it can be clearly seen that the correct answer choice would be option (b)

133. (c); Rite means a social custom, practice, or conventional act.
Abash means make (someone) feel embarrassed
Berth means a position in an organization or event.
Ramification means complex or unwelcome consequence of an action or event.
Going through the meaning of the given words it can be clearly seen that the appropriate answer choice would be option (c)

134. (a); Barred means prevent or prohibit (someone) from doing something
Adjourned means put off or postpone
Incurred means to experience something bad as a result of actions you have taken:
Discord means the state of not agreeing or sharing opinions
So, going through the meaning of the given options, it can be clearly seen that the correct answer choice would be option (a)

135. (c); Entitled means give (something) a particular title.
Coveted means greatly desired or envied.
Lodged means make or become firmly fixed or embedded in a place.
Melee means a confused fight or scuffle.
So, going through the meaning of the given options it can be clearly seen that the correct answer choice would be option (c)

136. (d); Taken off means depart from the ground

Called off means to cancel or abandon
Pay off means yield good results; succeed.
Siphoning means draw off or transfer over a period of time, especially illegally or unfairly
So, going through the meaning of the given words it can be clearly seen that the correct answer choice for the given question wold be option (d)

137. (e); Word used in the given question is both grammatically as well as contextually correct. So the correct answer choice would be option (e)
Journal means a record of things that you have done
Intrinsic means being an extremely important and basic characteristic of a person or thing
Luscious means pleasing to see, hear, or feel
Novice means a person who is not experienced in a job or situation.

138. (b); Disseminate means spread widely
Squander means allow to pass or be lost
Plummet means a steep and rapid fall or drop.

Going through the meaning of the given options, it can be clearly seen that the correct answer choice would be option (b)

139. (b); From the given options, only (ii) is able to connect the given sentences to make a meaningful and grammatically correct sentence. The sentence thus formed is 'Owing to the 17 new cases of the virus have been confirmed and there is increasing possibility of spread of virus to other countries, China will step up efforts to contain the coronavirus outbreak ahead of the Lunar New Year holidays.' Hence, the correct answer choice would be option (b)

140. (c); From the given starters, only (iii) is able to connect the given sentences to make a sentence which is both grammatically correct and contextually meaningful. The sentence thus formed is 'In what raises the doubts about the efficacy of the Right to Information Act in Haryana, only 35% penalty has been recovered since the setting up of the Haryana State Information Commission in 2006.' Hence, the correct answer choice would be option (c)

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REASONING ABILITY

Direction (1-4): Study the following information to answer the given questions:
Twelve persons are sitting around two circular table as one is inscribed in another one. All of them are facing towards the center.
A, B, C, D, E, F six persons are sitting around the inner circular table.
P, Q, R, S, T, U six persons are sitting around the outer circular table.
Note- The persons of outer circular table are sitting exactly behind the persons sitting around the inner circular table.
B is sitting second to the right of E. R is an immediate neighbour of the one who is sitting behind B. Only one person sits between A and F (either from the left or from the right). A is not an immediate neighbour of B. P is sitting behind F. Only two persons sit between R and T (either from the left or from the right). U is an immediate neighbour of P. D is an immediate neighbour of A. T is not sitting behind D. Q is not an immediate neighbour of R.

1. Who among the following person is sitting third to the left of A?
(a) F (b) E (c) D
(d) B (e) None of these

2. How many persons are sitting between S and P in the outer circle?
(a) One (b) More than three
(c) Three (d) None
(e) Two

3. Four of the following are alike in a certain way so form a group which of the following does not belong to the group?
(a) A, P (b) C, R (c) E, T
(d) B, U (e) D, S

4. Who among the following person is sitting immediate right of S?
(a) P (b) T (c) U
(d) R (e) Q

5. Six persons A, B, C, D, E and F lives on 6 different floors of a same building. Bottommost floor is first, the floor above it is second and so on till topmost floor which is sixth. A lives on odd numbered floor. C lives immediately below A. Two floors gap between floors of C and F.D lives immediately above F. B lives above E, who lives below F. How many persons live below E?
(a) None (b) One (c) Two
(d) Three (e) Four

6. Seven letters are arranged in a linear arrangement to form a meaningful word. A is second to the left of I. L is to the left of N. Not more than two letters are placed between I and G. G is placed to the right of I. G is not neighbor of E and D. D and E are placed next to each other. Which letter is placed in exactly middle of the meaningful word so formed. If more than one word is formed mark your option as X?
(a) N (b) L (c) X
(d) E (e) G

Directions (7-9): Study the following information carefully to answer the given questions:
A word and number arrangement machine when given an input line of words and numbers rearranges them following a particular rule. The following is an illustration of input and rearrangement.
INPUT—2538 5628 8516 7524 6325 2645
STEP I- 2358 2568 1568 2457 2356 2456
STEP II- 1568 2356 2358 2456 2457 2568
STEP III- 56 35 35 45 45 56
STEP IV- 11 8 8 9 9 11
Step IV is the last step of the rearrangement. As per the rules followed in the above steps, find out in each of the following questions the appropriate steps for the given input.
Input: 3846 9213 8273 7341 5218 3285 6925 4758

7. What will the addition of the numbers which is second, forth, sixth and eight from the left end in step IV?
(a) 32 (b) 23 (c) 38
(d) 40 (e) None of these

8. Which of the following would be the difference of the numbers which is 2nd from left end in step I and forth from right end in Step II?
(a) 1138 (b) 1287 (c) 1139
(d) 2125 (e) None of these

9. Which of the following element will be 3rd to the left of 7th from the left end in step III?
(a) 34 (b) 37 (c) 25
(d) 35 (e) None of these

Direction (10): In the following question a statement is given followed by two more statements numbered as I and II. You have to read both the statement and decide which of them strength which of them strengthens or weakens the statement.

The company A used to outsource its recruitment process for some years but this year the company has decided to conduct the recruitment process within the Organisation.

I. The employees who have been working in the Organisation are aware of that hard work is required to work in the company.

II. The company has decided to appoint three new persons in its senior level authority for the smooth recruitment process.

(a) Both I and II strengthens
(b) I strengthen while II weakens
(c) II strengthens while I is neutral
(d) Statement I and Statement II is neutral.
(e) Both I and II weakens.

Directions (11-14): Study the following information carefully and answer the questions given below:
Six boxes P, Q, R, S, T and U are placed in a stack one above other. Each contains different number of chocolates viz. 250, 190, 119, 175, 280 and 210.
Box P is placed immediately above box R. Three boxes placed between R and the box which contains 250 chocolates. Box which have 175 chocolates is just above the box which have 250 chocolates. One box placed between box T and the box which have 175 chocolates. U contains 210 chocolates. The box which contain 119 chocolates is placed below box U. Three boxes placed between box S and the box which have 119 chocolates. One box is placed between box Q and the box which have 190 chocolates.

11. Which box contains 210 chocolates?
(a) U (b) Q (c) R
(d) S (e) P

12. Which box is placed at topmost position?
(a) U (b) Q (c) R
(d) S (e) P

13. Box R and T together contains how many chocolates?
(a) 399 (b) 369 (c) 294
(d) 309 (e) 400

14. How many boxes are placed between box Q and the box which have 119 chocolates?
(a) one (b) two (c) three
(d) four (e) none

Directions (15-17): In each of the questions below are given some statements followed by some conclusions. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements, disregarding commonly known facts. Give answer

15. **Statements:** Some tube are bulb.
All light are tube
All current are light.
Conclusions:
I. Some Current are bulb
II. Some light being bulb is a possibility.
III. Some tube are not current.
(a) Both I and III follows
(b) either I or II follows
(c) Only II follows
(d) None follows
(e) None of these

16. **Statements:** Some file are copy
Some copy are eraser.
No Pen is file.
Conclusions:
I. Some file are eraser
II. All pen can never be copy.
III. No file is eraser
(a) Only I follow
(b) Only II follows
(c) Only III follows
(d) Either I or III follows
(e) None of the above

17. **Statements:** Some file are copy
Some copy are eraser.
No Pen is file.
Conclusions:
I. All copy can be pen.
II. Some copy can never be pen.
III. Some eraser being pen is a possibility.
(a) Only I follow
(b) Only II follows
(c) Only III follows
(d) Only II and III follows
(e) None of the above

Directions (18-21): Study the following information carefully and answer the questions given below.
Six persons J, K, L, M, N, O are born in six different years 1946, 1958, 1963, 1971, 1994, 2006. All of them like different colours Red, Black, Orange, Pink, White, Yellow.
Note- All the calculations of the ages are to be done on the basis of year 2019.
The sum of the ages of M and the one who likes Black colour is 86. The one who likes Pink colour was born in an even numbered year. M does not like red colour. The one who likes Pink colour is older than the one who likes Black colour. M does not like Pink colour. K is older than the one who like Pink colour. N likes Orange and was born in an odd numbered year. The sum of the ages of J and the one who likes Yellow colour is 81. O is younger than the one who likes orange colour. L does not like yellow colour.

18. Who among the following likes Red colour?
(a) J (b) O (c) M
(d) L (e) None of these

19. How many persons born after O?
(a) Two (b) Four (c) None
(d) One (e) Three

20. Which of the following statement is not correct regarding K?
(a) K is younger than M
(b) K likes Yellow
(c) K is elder to J
(d) The one who likes White is younger than K
(e) All are correct

21. In which of the following year J was born?
(a) 1994 (b) 1958 (c) 1971
(d) 2006 (e) 1946

22. Six persons L, M, N, O, P and Q sit in a linear row adjacent to each other facing north. Three persons sit between Q and P. N sits immediate left of Q. Two persons sit between N and M. How many persons sit to the left of M?
(a) one (b) two (c) three
(d) four (e) None

23. Which of the following symbols should replace the sign (@) and (%) respectively in the given expression in order to make the expression L ≥ U and R > J definitely true?
L ≥ K ≥ P = N = J @ U ≤ A % R
(a) ≤, = (b) ≤, ≤ (c) >, ≤
(d) =, < (e) ≥, <

24. Which of the following will be definitely true if the given expression T≥U≥M=N<J=P<Q≤R is definitely true?
(a) T< J (b) U>M (c) R>N
(d) R ≥ M (e) T<P

Directions (25-28): Study the following information carefully and answer the questions given below.
Twelve persons are born on three different dates 5, 12, 21 of four different months viz. March, May, September and November. Only one person is born on one date of a month. J was born on 5 of a month having 30 days. Only three persons were born between J and H. H does not born on an even date of a month. As many as persons born after H as born before A. Five persons born between A and D. Only two persons born between F and E. C born on an even date but immediately after K. Six person born between C and B. E born immediately before B. M born on an even date after L but before G.

25. How many persons born between C and F?
(a) Two
(b) More than three
(c) Three
(d) One
(e) None

26. Who among the following is born immediate before G?
(a) K (b) L (c) J
(d) M (e) D

27. H born on which of the following day?
(a) 21 May (b) 12 March (c) 5 September
(d) 21 March (e) 5 May

28. Which of the following statements is true?
(a) J and G both were born in same month
(b) F was born on odd date
(c) G was born on 5th
(d) B was born on 21st
(e) All are true.

29. In a certain code, numbers from (0-9) are coded as four alphabets i.e. '0389' is coded as 'AACD' , '146' coded as 'ABA' , then how is ' 257' coded?
(a) CBA (b) CDA (c) BAC
(d) AAD (e) BCB

30. If all the letters of each given words are arranged in alphabetical order within the words, then in how many words third and fifth letter remains on the same position as earlier?
I. MBEKTYD
II. GPNAQUS
III. XCJRHO
(a) Only I (b) Only I and II (c) All I, II and III
(d) Only II (e) None

Directions (31-32): Study the following information carefully and answer the questions given below.

The principal of St. Mary school organized extra classes for week students of X class and the concerned teachers are getting paid extra amount for the classes. But the average salary of teachers more or less remains the same.

31. Which of the following can be assumed from the given statement?
(I) The students of class X of school Y will score more marks than students of St. Mary school.
(II) Students of class X are not serious about exams.
(III) Extra classes arranged by the principal for students of class X will help the students to score well in exams.
(a) Both I and II (b) Both II and III (c) Only II
(d) Only III (e) None of these

32. What can be the reason behind the average of the salary remain same of teachers?
I. Student of class X attend the extra class two or three days in a week although the teachers provide the class regularly.
II. Teachers started taking more holidays after the commencement of the extra classes.

III. Teachers are already working overtime for checking and preparing homework for students on daily basis.

(a) Both I and II (b) Both II and III (c) Only II
(d) Only III (e) None of these

Direction (33): The tuda company is the third largest producer of steel with 1.5 lakh employees. The company is going to start a new unit by hiring 35% of its current employees. After its commencement the company will become the largest steel producer with 32.5 billion turnover.

33. Which of the following can be inferred from the given statement?

I. The app. turnover of new unit of tuda company will be 1.5 million.
II. The company is required to hire 52000 employees.
III. With 52500 new employees of the new unit, the company will be able to reach the 32.5 million turnover.
IV. The turnover of the tuda company is now below 32.5 million.

(a) Both I and II (b) Both II and III (c) Only IV
(d) Only III (e) Both III and IV

Directions (34-37): Study the following information carefully and answer the questions given below.

Ten persons are standing in a row facing north. All of them earn different amount viz. 3000, 4500, 5000, 7000, 8500, 10000. Three persons are standing between B and R. H is standing immediately ahead of B. L is standing adjacent to R. L is standing at extreme end. Six persons are standing between A and Y. Y is standing behind A. Only one person is standing between A and D. Q is standing ahead of G but behind Z.
The following information is given for the amount earn by them—
S@P means S earn more than P.
S#P means S earn less than P.
S$P means S earn equal to P.
The amount earn by all of them is given below—
A@Z$H@R$QG, YD#G, A#L#B

34. What will be the sum of the amount earn by Q, Z and L?

(a) 19000 (b) 18000 (c) 17000
(d) 20000 (e) 12000

35. How many persons are standing ahead of B?

(a) Two (b) More than three
(c) Three (d) One
(e) None

36. How many persons are standing between Q and R?

(a) Two (b) More than three
(c) Three (d) One
(e) None

37. How many persons earn less than G?

(a) Two
(b) More than three
(c) Three
(d) One
(e) None

Directions (38-40): Study the following information carefully and answer the questions given below.
A%B (7)- A is 12m in north of B
A$B (12)- A is 17m in south of B
A#B (32)- A is 37m in east of B
A&B (14)- A is 19m in west of B
M%K (33), J#K (9), G%J (19), H&G (23), N$H (25)

38. K is in which direction with respect to G?

(a) North (b) West (c) North-west
(d) East (e) South-west

39. If Z is the midpoint of the line formed between H and G, then what is the distance between H and Z?

(a) 12m (b) 14m (c) 16m
(d) 17m (e) 30m

40. If X is in west of J and lies on the line formed by H and N, then what is the distance between X and N?

(a) 10m (b) 24m (c) 6m
(d) 16m (e) 14m

Directions (41-45): In each of the following below is given a group of letters followed by four combinations of digits/symbols numbered (a), (b), (c) and (d). You have to find out which of the combinations correctly represents the group of letters based on the following coding system and mark the number of that combination as the answer. If none of the four combinations correctly represents the group of letters, mark (e), i.e. 'None of these', as the answer-\
Note: More than one condition may apply.

Letter	R	G	F	A	P	Q	U	M	E	I	B	J	S	O	L
Digit/ Symbol	#	2	7	µ	%	3	&	9	1	@	5	©	6	8	$

Conditions:

(i) If first letter is vowel and last letter is consonant then both are coded with the code of the consonant.
(ii) If both the 2nd and the last letter is vowel, then their codes are to be interchanged.
(iii) If the second letter is a consonant and the 2nd last letter is a vowel, both are to be coded as the code for the vowel.
(iv) If both 1st and fifth letter is consonant then both are coded as the code of third letter.
(v) If only one condition is applied among the above given, then the code of first letter is interchanged with code of second letter and third letter code interchanged with 4th letter and so on after that applied condition.

41. AMGFIS
(a) 6@27@4 (b) 6@27@6 (c) 6@27#6
(d) 6@2@76 (e) None of these

42. PUGRLE
(a) 2122#& (b) 221#2& (c) 212#&2
(d) 212#2& (e) None of these

43. UAIMUI
(a) @&9@µ& (b) @&@9µ& (c) @9&@µ&
(d) @&99µ& (e) None of these

44. MJGLBF
(a) ©2$227 (b) ©$2272 (c) ©$2227
(d) ©2$2$2 (e) None of these

45. GFPQMB
(a) %7%3%5 (b) 27%395 (c) 7%3%5%
(d) %7%395 (e) None of these

46. **Statement-**The Union health ministry has made Aadhaar a compulsory document for tuberculosis patients to be able to avail treatment under the government's Revised National Tuberculosis Control Programme (RNTCP).
(I) A person cannot take treatment of TB without Aadhar card.
(II) Patients suffering from TB will be unable to get benefits under a central government scheme till they produce their Aadhaar card.
(III) An individual eligible to receive the benefit under the scheme, is hereby, required to furnish proof of possession of Aadhaar number or undergo Aadhaar authentication.
(IV) The World Health Organisation(WHO) recently said that tuberculosis epidemic in India was "larger" than what had been previously estimated.
Which of the following could be the inference of the given statement?
(a) Only II (b) Only I and III (c) Only II and III
(d) Only I (e) None of these

47. **Statement-** The Captain Amarinder Singh-led government in Punjab has announced free education for girls in government schools and colleges from Nursery to PhD.
(I) Good social welfare law. It is initially for girls as they are comparatively disadvantaged. Hopefully it will soon be followed by free education for everyone.
(II) It is gender biased as if a poor or average person wants to educate his son for higher education he has to pay higher bills .If you are introducing a law / scheme / bills under no circumstance it should not favour any particular gender, if they are really concerned about education.
(III) Do not differentiate a poor or average person on gender. A poor boy or man should also get free education as well.
Which of the following argument holds strong for the given statement?
(a)Only II (b)Only III (c)Only II and III
(d)Only I and II (e)All of the above

Directions (48-50): Study the given information carefully to answer the following questions:

Six persons i.e. A, B, C, E, F and G who all are sitting around a circular table facing outside. They all are of different age. F is third youngest person. Only two persons sits between E and F. G sits second to the left of C, who is 20 years of age. The one who is second oldest person is of 24 years of age. G is elder than A and C but not the eldest. C sits on the immediate right of E. B is elder than A and G. A and G are not immediate neighbours. The one who is the youngest is less than 20 years of age. A is not younger than F.

48. What will be the possible age of A?
(a) 25 years (b) 20 years (c) 27 years
(d) 19 years (e) 22 years

49. What is the position of G with respect to A?
(a) Third to the left
(b) Second to the right
(c) second to the left
(d) Both (a) and (e)
(e) Third to the right

50. Who among the following is the youngest among all?
(a) A (b) E (c) C
(d) F (e) None of these

QUANTITATIVE APTITUDE

Direction (51-55): In the given questions, two quantities are given, one as **'Quantity 1'** and another as **'Quantity 2'.** You have to determine relationship between two quantities and choose the appropriate option:

51. A is twice as efficient as B. Both can complete a work together in $7\frac{1}{2}$ days.
Quantity 1: Time taken by B to complete the work alone.
Quantity 2: If C is 50% more efficient than A, then time taken by C to complete the work alone.
(a) Quantity 1 > Quantity 2
(b) Quantity 1 ≥ Quantity 2
(c) Quantity 2 > Quantity 1
(d) Quantity 2 ≥ Quantity 1
(e) Quantity 1 = Quantity 2 or Relation cannot be established

52. One of the roots of $2x^2 + bx - 5 = 0$ is 1.
Quantity 1: Value of the other root.
Quantity 2: 2.5
(a) Quantity 1 > Quantity 2
(b) Quantity 1 ≥ Quantity 2
(c) Quantity 2 > Quantity 1
(d) Quantity 2 ≥ Quantity 1
(e) Quantity 1 = Quantity 2 or Relation cannot be established

53. Two dices are rolled simultaneously.
Quantity 1: Probability that the sum of the numbers that appeared is a multiple of 5.
Quantity 2: 1/6
(a) Quantity 1 > Quantity 2
(b) Quantity 1 ≥ Quantity 2
(c) Quantity 2 > Quantity 1
(d) Quantity 2 ≥ Quantity 1
(e) Quantity 1 = Quantity 2 or Relation cannot be established

54. Sum of height and diameter of the cylinder is 28 meter.
Quantity 1: Curved surface area of the cylinder whose respective ratio of height to diameter is 3 : 4
Quantity 2 : Curved surface area of the cylinder if height of cylinder is 10 m.
(a) Quantity 1 > Quantity 2
(b) Quantity 1 ≥ Quantity 2
(c) Quantity 2 > Quantity 1
(d) Quantity 2 ≥ Quantity 1
(e) Quantity 1 = Quantity 2 or Relation cannot be established

55. Product of digits of a two digits number 'N' is 21
Quantity 1 : N
Quantity 2 : 130–N
(a) Quantity 1 > Quantity 2
(b) Quantity 1 ≥ Quantity 2
(c) Quantity 2 > Quantity 1
(d) Quantity 2 ≥ Quantity 1
(e) Quantity 1 = Quantity 2 or Relation cannot be established

56. From container A containing 54 liter of mixture of milk and water in ratio of 8 : 1 , 18 liter of the mixture is taken out and poured into container B in which ratio of milk to water is 3 : 1. If difference between total milk and total water in container B is 30 liter then find the quantity of initial mixture in container B.
(a) 30 Liter (b) 28 Liter (c) 32 Liter
(d) 36 Liter (e) 40 Liter

57. In a match of 50 overs, team A's average runs for first thirty overs was 4.5 runs/over while for the remaining 20 overs the average was 5.5 runs/over. Team B chased the target and lost by 10 runs. Find the average runs per over scored by team B. (team B played all the 50 overs).
(a) 4.4 (b) 5.2 (c) 4.7
(d) 5.6 (e) 3.8

58. In a bag which contains 40 balls, there are 18 red balls and some green and blue balls. If two balls are picked up from the bag without replacement, then the probability of the first ball being red and second being green is 3/26. Find the number of blue balls in the bag.
(a) 16 (b) 12 (c) 10
(d) 14 (e) 8

59. A is 50% more efficient than B. They together start the work and $\frac{7}{12}^{th}$ of work is left after 8 days. Find in what time B alone will complete the whole work.
(a) 36 days (b) 44 days (c) 50 days
(d) 40 days (e) 48 days

Direction (60 – 65): Given below table shows number of employees joined (at the beginning of the year) & left (at the end of the year) in three companies i.e. A, B & C in three years (2001, 2002 & 2003). Read the data carefully and answer the questions.(Some data are missing).

Years	A		B		C	
	Joined	Left	Joined	Left	Joined	Left
2001	102	_	96	18	84	36
2002	78	24	72	_	108	_
2003	112	_	144	_	124	28

60. In year 2000 total employee who joined A is 64 which is 32% of total employee working in A that year and total employee who left A in year 2000 & 2001 is 20 & 32 respectively. If employee left B in year 2002 is 16 and this company starts in 2001, then find total employee working in B at the end of 2002 is approximate what percent of total employee working in A at the end of 2002?
(a) 36% (b) 48% (c) 52%
(d) 44% (e) 56%

61. The ratio of total employee who left B & C in the year 2002 is 7 : 9 and total employee working in B & C at the end of 2000 are 160 & 172 respectively. If total employee working at the end of 2003 in C is 406, then find total employee working in B at the end of 2002?
(a) 284 (b) 296 (c) 298
(d) 302 (e) 306

62. Total employee working in B at the end of 1999 is 220 and 28 employee left company in 2000, while 32 new employees joined the company. If respective ratio of employee left the company B in year 2002 & 2003 is 6 : 7 and total employee working in B at the end of 2003 is 466, then find total employee left B in 2002 & 2003 together?
(a) 52 (b) 48 (c) 42
(d) 36 (e) 32

63. The average of total employee left company A in the given three years is 21 and ratio of employee left in 2001 to in 2003 is 7 : 6. If company A start in 2001, then find total employee working in A at the end of 2002 is what percent more than total employee who joined company C in the year 2002?
(a) 20% (b) 15% (c) 25%
(d) 30% (e) 22.5%

64. Total employee who left C in the year 2002 is $33\frac{1}{3}\%$ more than total employee who left A in same year and total employee who left B in 2002 is 62.5% of total employee who left C in same year. If all three companies start in 2001 and total 22 employee left A in 2001, then find the respective ratio of employee working in B , C & A at the end of 2002?
(a) 65 : 62 : 69 (b) 66 : 62 : 69 (c) 65 : 61 : 67
(d) 61 : 62 : 69 (e) 65 : 62 : 67

65. Each company start in 2001 and ratio of total employee left A in 2001 to that of B & C together in 2002 is 1 : 2. If total employee who left A in 2001 and that of B & C together in 2002 is 36 and total employee who left B in 2002 is 50% of employee who left C in same year, then find difference between total employee working in C at the end of 2003 and total employee working in A at the end of 2002 ?
(a) 92 (b) 82 (c) 72
(d) 96 (e) 86

Directions (66-71): In each of these questions, two equations numbered I and II are given. You have to solve both the equation and give answer
(a) if x < y
(b) if x ≤ y
(c) if x > y
(d) if x ≥ y
(e) if x = y or the relationship cannot be established

66. **I.** $2x^2 + 11x + 15 = 0$ **II.** $4y^2 + 13y + 9 = 0$

67. **I.** $x^2 - 36x + 324 = 0$ **II.** $y^2 - 35y + 216 = 0$

68. **I.** $x = (216)^{1/3}$ **II.** $y^2 = 6$

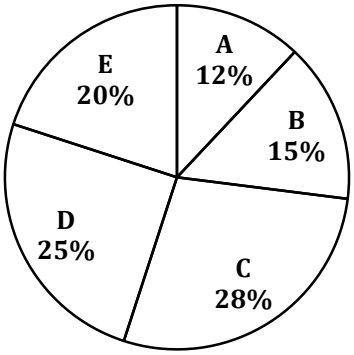
69. **I.** $2x^2 + 17x + 35 = 0$ **II.** $3y^2 + 17y + 24 = 0$

70. **I.** $x^2 + 72 = 108$ **II.** $y^3 + 581 = 365$

71. **I.** $8x^2 + 58x + 39 = 0$ **II.** $8y^2 - 14y - 15 = 0$

Direction (72 – 77) : Given pie chart shows percentage distribution of viewers of a Tv channel in five different villages (A, B, C, D & E) and table shows number of viewers who subscribed the channel. Read the data carefully and answer the questions.
Note – Total viewers = Total subscriber + Total unsubscribe

TOTAL VIEWERS = 3000



Villages	People who subscribed
A	220
B	250
C	440
D	350
E	180

72. Total unsubscribed viewers from B & E together is what percent more than total unsubscribed viewers from C?
(a) 50% (b) 55% (c) 45%
(d) 40% (e) 42%

73. If total male unsubscribed viewers in D is $66\frac{2}{3}\%$ more than that of female unsubscribed viewers, then find ratio of total male unsubscribed viewers in D to total unsubscribed viewers in A & C together?
(a) 25 : 53 (b) 25 : 54 (c) 7 : 9
(d) 23 : 54 (e) 2 : 3

74. Find the central angle for total unsubscribed viewers in B & C and total subscribed viewers in E together with respect to total viewers?
(a) 133.6° (b) 136.6° (c) 63.6°
(d) 130.6° (e) 93.6°

75. Out of total viewers in village C , $46\frac{3}{7}\%$ are female and $\frac{7}{13}th$ of total female are unsubscribed viewers, then find total unsubscribed male viewers from village C?
(a) 170 (b) 180 (c) 210
(d) 190 (e) 250

76. In another village F total subscribed viewers are 20% more than total unsubscribed viewers in village A and total subscribed viewers in village F are $\frac{3}{7}th$ of total viewers in that village. Find total unsubscribed viewers from village F is what percent less than total unsubscribed viewers from village C?
(a) 42% (b) 44% (c) 48%
(d) 46% (e) 40%

77. If the above data given for the year 2017 and in 2018 total viewers increased by 40%, while percentage distribution of viewers of TV channel in five different villages remain same as in 2017. If number of subscribed viewers from village A, B, D & E in 2018 increased by 25%, 20%, 14% & 10% respectively and total subscribed viewer from all the five village in 2018 are 1400, then find total unsubscribed viewers from C in 2018?
(a) 942 (b) 952 (c) 948
(d) 956 (e) 964

Directions (78-82): The following questions are accompanied by two statements A and B. You have to determine which statements(s) is/are sufficient / necessary to answer the questions.

(a) Statement **A** alone is sufficient to answer the question but statement **B** alone is not sufficient to answer the questions.
(b) Statement **B** alone is sufficient to answer the question but statement **A** alone is not sufficient to answer the question.
(c) Both the statements taken together are necessary to answer the questions, but neither of the statements alone is sufficient to answer the question.
(d) Either statement **A** or statement **B** by itself is sufficient to answer the question.
(e) Statements **A** and **B** taken together are not sufficient to answer the question

78. What is the value of rate of interest?
A. A sum of Rs 8000 is invested at simple interest for 3 years in scheme A which offers a certain rate of interest. Amount obtained from scheme A is equal to the amount obtained when Rs 9000 is invested in scheme B for 2 years at C.I.
B. Rate of interest for scheme B is same as rate of interest for scheme A.

79. 4 men & 18 women can do a piece of work in 2.5 days, then in how many days 12 woman can complete the same piece of work?
A. Ratio of efficiency of men to women is 3 : 2.
B. 6 men & 6 women can complete the same work in 4 days.

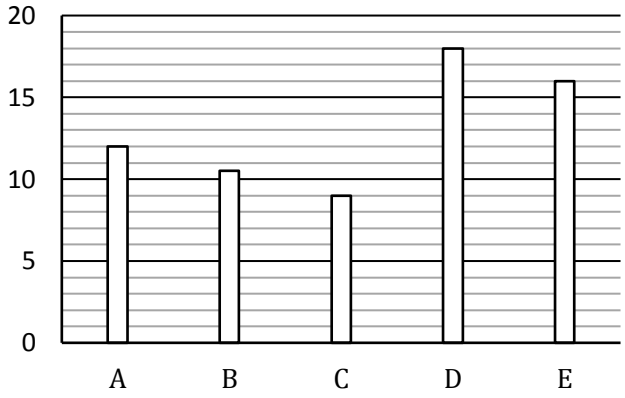
80. What will be speed of stream, if speed of boat in still water is 22.5 km/hr?
A. The time taken by boat to cover 120 km upstream is 4 hours more than time taken by boat to cover same distance in downstream.
B. Boat takes total 15 hours to cover 150 km in downstream and upstream.

81. What will be sum of two natural numbers X & Y?
A. X & Y both are multiple of 24, while X is 50% more than Y.
B. $\frac{X}{30}$ & $\frac{Y}{40}$ both are natural number.

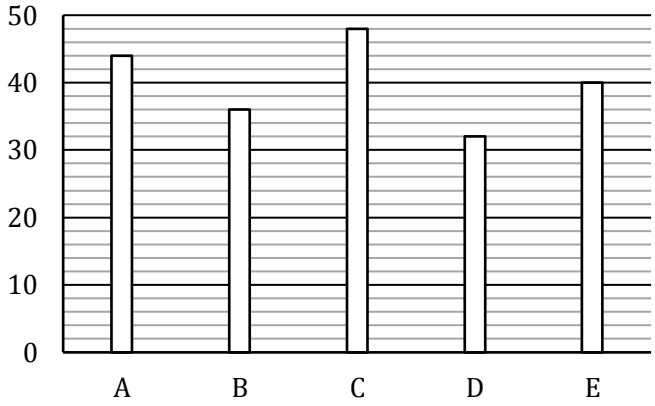
82. There is (2a+ 16) students in a class with three streams, i.e. art, science & commerce. The ratio of students who take art to science is 4 : 1. Find total number of students in class.
A. Total students who take art is 8 more than total students who take commerce and probability of selecting one student who take science is $\frac{1}{8}$.
B. Total commerce students in class are 25% less than total art students in the class.

Direction (83 – 88): Given below bar graph (I) shows total students (Boys + girls) in thousands who have taken admissions in five different college and bar graph (II) shows percentage of girls taken admission in these five colleges. Read the data carefully and answer the questions.

(I)



(II)



83. Total boys taken admission in college B & D together are what percent more than total boys taken admission in E?
(a) 92.5% (b) 97.5% (c) 99.5%
(d) 102.5% (e) 84.5%

84. 75% and 80% of total girls taken admission in college A & C respectively appeared in exam and total students appeared in exam from A & C is 17910. If total boys appeared in exam from A is 6048, then find difference between boys who did not appeared in exam from college A & C?
(a) 438 (b) 428 (c) 418
(d) 408 (e) 448

85. Find the ratio of total boys taken admission in college A & B together to total girls taken admission in D & E together?
(a) 13 : 11 (b) 23 : 19 (c) 21 : 17
(d) 21 : 19 (e) None of these

86. If in college F total girls taken admission are 62.5% more than that of total girls taken admission in C and total boys taken admission in college E & F together is 20580, then find percentage of girls taken admission in college F?
(a) 33% (b) 43% (c) 39%
(d) 37% (e) 45%

87. In each college there are only three streams (i.e. science, commerce & art) and in college B respective ratio of students taken admission in science, commerce & art is 2 : 1 : 4. If out of total girls taken admission in college B, 40% taken admission in science stream, 25% taken admission in commerce stream, then find difference between boys taken admission in art & science streams from college B?
(a) 3242 (b) 3464 (c) 3189
(d) 3345 (e) 2964

88. Find the average number of boys taken admission from all the five given colleges?
(a) 7992 (b) 7982 (c) 6848
(d) 7292 (e) None of these

89. There is a square field of area 'X' square meters. A cylindrical ditch of radius 7 meters and depth 2 meters is dug, and the earth is taken out and spread over the remaining part of the square field, the height of square field which goes up by 0.77 meters. What is the value of 'X' ?
(a) 548 m^2 (b) 524 m^2 (c) 518 m^2
(d) 554 m^2 (e) 504 m^2

90. A man invested an amount at the rate of 10% p.a. on compound interest and after two years he again invested half of the initial amount. If man got Rs. 457.2 Rs. as interest after three years, find the amount received by man after three years, if he invested same amount on simple interest at rate of 15% p.a.?
(a) 1740 Rs. (b) 1720 Rs. (c) 1760 Rs.
(d) 1780 Rs. (e) None of these

91. A and B entered in a business by making investment of Rs. 4000 & Rs. 5500 respectively. After six months A & B withdrew Rs. 1000 and Rs. 1500 respectively and C joined them with capital of Rs. 4x. If after one year and three months C received Rs. 2250 as profit share out of total profit of Rs. 12250, then find investment of C?
(a) Rs. 3600 (b) Rs. 3200 (c) Rs. 4400
(d) Rs 3000 (e) Rs. 2800

92. Train A can cross a man in 8 sec and a 180 m long platform 'P' in 17 sec. If train A cross train B which is running in opposite direction at speed of 108 km/hr in 8 sec, then find time taken by train B to cross platform P?
(a) 16 sec (b) 11 sec (c) 14 *sec*
(d) 12 sec (e) 15 sec

93. There are two shopkeepers, first shopkeeper calculates his profit percent on the selling price whereas the second shopkeeper calculates his profit percent on the cost price. If the selling price for both the shopkeeper is same and the difference between their profits is Rs.175. Then, calculate the sum of the cost price for both the shopkeeper if the profit percent for the both shopkeeper is 25%?
(a) Rs 5425 (b) Rs 4875 (c) Rs 4675
(d) Rs 5275 (e) Rs 5325

94. If 6 years are subtracted from the present age of Ayush and takes 25% of that then we get the present age of his only son. 4 years ago, his daughter's age is 7 years more than his son. Sum of daughter's present age and his wife's present age is 10 years more than Ayush's present age then find the present age of Ayush if average of present age of entire family is 30.25 yr ?
(a) 45 year (b) 50 year (c) 60 year
(d) 40 year (e) 36 year

95. 'X' is a bread seller who marked up price of each bread packet by 150% above and allow discounts of 40% and made a profit of Rs. 30 on each bread packet. If 'X' allows 37.5% discount on each packet, then find how much profit he gets on selling 80 bread packets?
(a) Rs 2750 (b) Rs 3200 (c) Rs 2500
(d) Rs 2700 (e) Rs 2400

Direction (96 – 100) : Read the data carefully and answer the questions.
A company is the producer of bottles and it used to sell bottles through distributor on a condition that on selling the stock of every 50 bottles, he will get Rs. 1000 as commission. The distributor is responsible to sell all those bottles to retailers. If he marks the bottles at the price which is 30% above the production cost (cost price) and allows a discount of Y%. He sells total of 'X' bottles which is 40 less than total received stock by him. Total production price of whole stock of bottles received by him to sell to retailers is Rs. 7.8 lakhs. The commission received by distributor is Rs. 7000 and he made a profit of Rs 1.4 lakhs on selling the bottles.

96. What is value 'Y' ?
(a) $9\frac{9}{13}\%$ (b) $7\frac{9}{13}\%$ (c) $5\frac{9}{13}\%$
(d) $8\frac{9}{13}\%$ (e) None of these

97. What will be ratio of Y : (X + 40)?
(a) 10 : 511 (b) 10 : 503 (c) 10 : 513
(d) 10 : 507 (e) 10 : 509

98. Instead of 'Y' employee allow 10% discount on one bottle, then percentage profit of distributor?
(a) 17% (b) 15% (c) 12%
(d) 10% (e) 19%

99. If company added given commission in cost price and he give stock of (X + 450) bottles to another distributor who sold all stock, then find new cost price of one bottle?
(a) 2200 Rs. (b) 2020 Rs. (c) 2040 Rs.
(d) 2060 Rs. (e) 2080 Rs.

100. If distributor allowed two successive discounts of 5% and 12.5% on marked price, then find the profit made by distributor on selling of one bottle?
(a) 161.25 Rs. (b) 162.25 Rs. (c) 172.25 Rs.
(d) 176.25 Rs. (e) 174.25 Rs.

ENGLISH LANGUAGE

Directions (101-105): Read the following passage and answer the questions as directed.

Artificial intelligence (AI) is all the rage these days. A recent article noted that 'robots' — shorthand for AI in the tabloids — will be able to write a fiction bestseller within 50 years. I suppose that would be shocking to me as a novelist if most fiction bestsellers were not already being written by 'robots'. Or so one feels, keeping publishing and other vogues in mind: a bit of this, a bit of that, a dash of something else, and voila you have a bestseller! In that sense, perhaps the rise of AI will make us reconsider what we mean by human intelligence. This discussion has been neglected for far too long. Take my field: literature. The Chinese company, Cheers Publishing, lately offered a collection of poems written by a computer program. So, are poets, generally considered to be suicidal in any case, jumping off the cliffs in droves as a consequence? Well, this is a selection from one of the AI poems I found online: "The rain is blowing through the sea / A bird in the sky / A night of light and calm / Sunlight / Now in the sky / Cool heart / The savage north wind / When I found a new world."

Yes, there are aspiring poets — and sometimes established ones — who write like this, connecting words centripetally or centrifugally to create an effect. I think they should have been pushed off literary cliffs a long time ago. Because this is not poetry; this is just the technique of assembling words like poetry. There is a difference between the intelligence required to write poetry and the skills required to write it. That poetic intelligence is lost without the required poetic skills, but the skills on their own do not **(A)suffice** either. The fact that lines like this, written by AI, can be considered poetry does not reflect on the intelligence of AI. It reflects

on the intelligence of those readers, writers, critics, editors, publishers and academics who have not yet distinguished between gimmickry and mimicry on the one side and the actual freshness of a chiselled line on the other. But this is a small example. Surely, AI might also make **(B)** ……., including that of considering something like IQ to be a sufficient index of human mental capacity! Because if we think that AI can replace human intelligence, then we are simply not thinking hard enough.

(C) One of the major **(1) activity** here is that of considering **(2) intelligence** to be something **(3) different** from and raised above the **(4) failures** of living. This leads to the misconception that intelligence can be **(D)**……. to something else — say, a robot — without becoming something else. Human intelligence cannot be passed on to something else: What is "passed on" is always a different kind of 'intelligence'. Even the arguments that AI — or, as in the past, robots — can enable human beings to lead a gloriously workless existence is based on a similar misconception. Because human intelligence is embedded in human existence, 'work' as human activity in the world is not something human beings can do without.

101. Which of the following words can replace the word given in bold in (A) without changing the meaning of the sentence?
(a) disperse (b) squander (c) dissipate
(d) serve (e) spread

102. Out of the following options which option does support the statement "**There is a difference between the intelligence required to write poetry and the skills required to write it**," made by the author in the paragraph?
(a) There are aspiring poets who write like this, connecting words centripetally or centrifugally to create an effect, this is not poetry; this is just the technique of assembling words like poetry.
(b) that would be shocking to me as a novelist if most fiction bestsellers were not already being written by 'robots.'
(c) The lines written by AI considered as poetry does not reflect on the intelligence of AI.
(d) Both (b) and (c)
(e) None of the above

103. Which of the following phrases should fill the blank given in (B) to make it grammatically and contextually correct and meaningful?
(a) has always been a mistake to expect him to 'solve' problems without human effort
(b) us discover our basic lack of intelligence in other areas
(c) often atheistic fans of AI who believe that it is 'The solution' are making the same mistake
(d) has had a crucial role in shaping cognitive capacity and brain evolution
(e) None of the Above

104. The sentence given in (C) has four words given in bold. Amongst given bolded words, which of the followings must replace each other to make the sentence contextually correct and meaningful.
(a) 2-4 (b) 2-3 (c) 1-4
(d) 3-4 (e) 1-3

105. Which of the following words given in the options should come at the place marked as 'D' in the above paragraph to make it grammatically and contextually meaningful and correct? Also, the word should fill the two sentences given below to make them contextually correct and meaningful?
(i) They aim to prevent women from being …… to a secondary role.
(ii) United were …….. to division two.
(a) forecasted (b) relegated (c) researched
(d) published (e) vanished

Directions (106-110): Read the following passage and answer the questions as directed.

We expect individuals **(I)** to take charge of their lives, to assume responsibility for their decisions. But when individuals group together, a problem arises. Groups can't take charge of themselves, nor can every member simultaneously take charge of the entire group. Someone from the group is invariably asked to show the way, to become the primary agent, to lead. Yet, not everyone who occupies high office is a leader. A person who merely **(II)** or has management skills is not a leader. Moreover, not everyone who assumes the role of a leader is able to play it well. What qualities then make for a leader? Which **(A)virtues** are required to provide ethical leadership? I suppose there is little new **(III)**. But let me still give it a shot in the hope that it serves as a good reminder. And in the election year, why not focus on qualities necessary for political leadership?

If a person is chosen to lead the group, it is her responsibility to take care of the interest of each person of the entire group. This often **(B)**…….. putting collective interest before her own interest or that of her preferred group. For this to happen, she must first be able to identify the common good, to have a grasp of what is acceptable to all, to have an inclusive vision. This requires an infinite capacity to listen to others, to learn from them, to have the intellectual ability to critically examine and evaluate what everyone wants and needs, and then put them all together. *Since this intellectual formulation can only be the first step, an estimate of the real quality of a decision is not known until it is implemented*; ……**(C)**……*This requires him to*

keep his ear to the ground, listen patiently to criticism to judge if his policies are working. He must not be defensive when criticised, or evade uncomfortable questions, but face criticism head on and be able to sift the wheat from the chaff. It also necessitates that a leader show flexibility and an ability for course correction by admitting mistakes. He should know that one's stature is not diminished by accepting fallibility. A leader must be a good communicator, and that is greatly helped if he has a way with words. But all the rhetorical flourish is of no avail if the speech lacks sincerity and conviction. Finally, a good leader knows that nothing can be achieved without the collective expertise and wisdom of a support team.

It is equally tempting to pick those one has taken a fancy to, who are personally loyal. But such people often lack spine. ***(D)****Fearful people with poor ability can never offer good advice to their leader and could allow bad decisions to prevail that push the country down a ruinous path.* Besides, they are often among the first to backstab the leader once out of power. Thus, personal likes and dislikes too must be set aside.

106. Which of the following words can replace the word given in bold in (A) without changing the meaning of the sentence?
(a) gentry (b) Fortes (c) rage
(d) tantrum (e) rampage

107. In the Question below three phrases are given which must be filled in the positions given in I,II and III in the passage. From the options given below, choose the correct order of phrases that should be filled in the positions given.
A. one can say on this matter
B. to be their own leaders
C. coordinates the actions of others
(a) ABC (b) CAB (c) BCA
(d) BAC (e) ACB

108. Which of the following words should fill in the blank in (B) to make a contextually correct and meaningful sentence?
(a) arouse (b) entails (c) sheers
(d) garners (e) evokes

109. Two sentences are given in italics on both sides of C. Which of the following statements can come in between the two sentences in place of C so as to maintain the continuity of the paragraph?
(a) this means that our leaders must owe supreme loyalty to nothing
(b) understand the purpose of the job, can speak their mind, and are able, without fear
(c) such persons can be identified only by one who possesses these qualities
(d) Its deficiencies begin to show up only when put into practice.
(e) None of the above

110. In the passage given, a sentence D is given in Italics. There may or may not be an error in one part of the sentence. Choose the part which has an error in it as your answer.
(a) Fearful people with poor ability can
(b) never offer good advice to their leader
(c) and could allow bad decisions to prevail
(d) that push the country down a ruinous path.
(e) no error

Directions (111-115): Read the following passage and answer the questions as directed.

Start-ups troubled by the so-called angel tax may soon receive some **(A)……** from the government. On Monday, the Centre set up a five-member working committee to look into revising the **(B)norms** of the angel tax imposed on start-ups. The tax, which was first introduced in 2012 to curb money-laundering through the **(i)** at bloated prices, has caused a lot of anguish among start-up investors in the country. Start-up owners have complained that income tax officials have asked many start-ups to cough up money when they try to attract capital into their entities by issuing new shares. For its part, the IT department fears that start-ups may be used as convenient tools to launder illegally acquired money, so a tax on investments beyond a certain threshold is **(ii)**. **(C)** But while the **(1) unintended** of such an angel tax may be **(2) benefits**, the arbitrary nature of it means the cost of **(3) intent** consequences could be larger than the supposed **(4) justifiable**. In trying to curb money-laundering, Section 56(2)(viib) of the Indian Income Tax Act, 1961 gives income tax officials a free hand to harass even genuine start-ups looking to raise investments for their growth. Under the Act, the IT department is free to arbitrarily decide the fair value of a company's share and tax start-ups if the price at which their new shares are sold to investors is higher than the fair value of these shares. The broad-brush tax on all investments means an unnecessary cost is **(iii)**community simply because of the lack of better means at the government's disposal to tackle black money.

The committee set up by the government will, among other things, consider raising the threshold beyond which new investments into start-ups will be taxed. It is expected that start-ups with aggregate paid-up share capital and share premium of less than ₹25 crore, against the previous threshold of only ₹10 crore, will not be taxed while attracting new investment. This would definitely make life easier to a certain extent for angel investors and start-ups. But it will not address the real problem with the angel tax, which has to do with the unbridled power that it vests in the hands of the income tax authorities. Investors, foreign or domestic, may become wary of investing in new ideas when they are taxed while risking money on untested ventures. So the government should look to withdraw the angel tax and focus instead on building the capability to better identify and rein in illegal wealth. Otherwise it risks killing the nascent start-up ecosystem in the country.

111. Which of the following words should fill in the blank in (A) to make a contextually correct and meaningful sentence?
(a) collusion (b) commotion (c) concession
(d) digression (e) fluctuation

112. Which of the following words can replace the word given in bold in (B) without changing the meaning of the sentence?
(a) Measures (b) Deviations (c) Regulations
(d) Standards (e) Abbreviations

113. In the question below three phrases are given which must be filled in the positions given in i, ii and iii in the passage. From the options given below, choose the correct order of phrases that should be filled in the positions given.
A. necessary to deter such shady operations
B. sale of shares of private unlisted companies
C. imposed on the wider start-up
(a) ABC (b) CAB (c) BCA
(d) BAC (e) ACB

114. The sentence given in C has four words given in bold. Amongst given bolded words, which of the followings must replace each other to make the sentence contextually correct and meaningful.
(a) 2-4 (b) 1-3 (c) 1-4
(d) 3-4 (e) Both (a) and (b)

115. As per the information given in the passage, out of the following options which option does best explain the term "angel investor"?
(a) Angel investors are those who don't look for the low risk investment that might yield a more reliable return, because those startups fail too.
(b) Angel investors are those who own shares in the business, not revenue, and not profits.
(c) An angel investor is an affluent individual who provides capital for a business start-up.
(d) Angel investors are often retired entrepreneurs or executives, who may be interested in angel investing for reasons that go beyond pure monetary return.
(e) None of the above

Directions (116-120): In each of the following questions a grammatically correct and meaningful sentence is given with four words given in bold in each. Which of the following words should replace each other to form a meaningful and grammatically correct sentence. The meaning can be different from the one in question.

116. The Central government is unable to provide the funds while Kerala has been stopped in its (A)**tracks** from seeking resources from (B) **abroad**, either from the Kerala (c)**diaspora** or from friendly (D) **overseas** governments.
(a) C-B (b) A-D (c) B-D
(d) A-B (e) No Interchange Possible

117. Immediately the sympathies of the
(A) **police** and
(B) **magistrates**, some sections of the media and
(C) **public** opinion swing towards the
(D) **perpetrator**, not the victim.
(a) A-C (b) A-B (c) B-D
(d) B-A (e) No Interchange Possible

118. It is (A) **imperative** that there be course corrections; otherwise the (B)**exercise** runs the risk of fueling a (C) **parallel** movement against the state by those being (D)**victimised** now.
(a) A-D (b) A-C (c) A-B
(d) B-D (e) No interchange is possible

119. The tsunami of 2004 and the (A) **threat** of piracy in the Indian Ocean provided India an (B)**opportunity** to test its new posture. Everybody was (C)**grateful**, but it made no difference to India's claim to (D)**permanent** membership.
(a) No interchange possible
(b) A-B
(c) B-C
(d) B-D
(e) A-D

120. The government has (A) **tampered** with institutions by appointing its own people to positions of (B)**authority**, and by using the (C) **Enforcement Directorate**, Income Tax authorities, the Central Bureau of Investigation and the (D)**police** as bulldozers to flatten out any site of opposition.
(a) A-C (b) B-D (c) C-D and A-B
(d) C-D (e) A-D

Directions (121-125): In each of the following questions a sentence is given with a word given in BOLD. Corresponding to each question three sentences are given with the use of the same word. From the options choose the sentences which give a DIFFERENT MEANING for the word used in the sentence above. The meaning used in the sentence(s) should be different from the one used in the main sentence.

121. The leaders of our ruling dispensation seem to have no respect for the rule of law, nor for the rules that regulate speech in public spaces.

(I) Because the soldier had saved his entire unit, the president gave him **dispensation** for his wartime crimes.
(II) Scholarship is conveyed to a wider audience than under the old **dispensation**.
(III) At the close of the Jubilee this **dispensation** was extended to all who had expired on the way to Rome.
(a) Only I (b) Only II (c) Only III
(d) Both I and II (e) Both I and III

122. This is the latest instalment in the rather **sordid** story of institutional decay in India, overseen by the leaders of the Bharatiya Janata Party (BJP).

(I) He remained, however, uncertain how to do so without immersing himself further in Lydia Larkin's **sordid** activities.

(II) The overcrowded housing conditions were **sordid** and degrading.

(III) Everyone knows of the bank's manager **sordid** plan to steal the money.

(a) Only III (b) Only II (c) Both I and II
(d) Only I (e) Both II and III

123. Competitive federalism, in the context of interaction with foreign countries, **promoted** by Prime Minister Narendra Modi, has proved to be a double-edged sword.

(I) In 1761 he was **promoted** to be member of council, under the presidency of Mr Vansittart, who had been introduced by Clive

(II) The industry was actively **promoted** by a Frenchman named Jumel, in the service of Mehemet Ali, from 1820 onwards with great success.

(III) He actively **promoted** the incorporation of the left bank of the Rhine with France.

(a) Only III
(b) Both I and II
(c) Only I
(d) Both II and III
(e)All of the above

124. When India's aspiration for permanent membership of the UN Security Council met with strong **resistance**, New Delhi hit upon the idea of forcing a vote in the General Assembly.

(I) The president's healthcare plan drew a lot of **resistance** from his political rivals.

(II) The employees' showed their **resistance** to the salary cuts by picketing outside the factory.

(III) He also investigated electrical endosmosis and the electrical **resistance** of electrolytes.

(a) Only II
(b) Both I and II
(c) Only II
(d) Only III
(e) None of the above

125. The constitutional framework does not provide thick or **substantive** conceptions of how we shall think, and in what we shall believe.

(I) Why should I take the herb when there is no **substantive** proof it will ease my pain

(II) Not only do we hear of these varieties of practice, but also of the laying on of hands; together with prayer as a **substantive** rite unconnected with baptism.

(III) They said no **substantive** objections to the agreement have been raised

(a) Only I
(b) Only II
(c) Both II and III
(d) All of the above
(e) None of the above

Directions (126-130): In the questions given below a sentence is given with two blanks in each. Corresponding to each question two columns are given with three words in each column. Which combination of words from the two columns will perfectly fit into the blanks to make the sentence contextually correct and meaningful.

126. Mutual political suspicion and a lack of ..... of the complexities of the international situation have brought about a confrontation. The Chief Minister may have even made ..... and tactical misjudgments.

Column I		**Column II**
A. Appreciation		D. Acceptable
B. Acknowledgement		E. Diplomatic
C. Plethora		F. Strategic
(a) C-E	(b) A-F	(c) B-F and A-E
(d) B-D	(e) C-D	

127. The investigation also ..... that another pilot flying as Staff On Duty entered the cockpit after pressing the cockpit buzzer several times. The pilot in command ..... that he allowed the SOD inside the cockpit because the buzzer was distracting.

Column I		**Column II**
A. Divulged		D. Advanced
B. Rejected		E. Submitted
C. Communicated		F. Recommended
(a) C-D	(b) B-E	(c) A-E
(d) A-F	(e) B-E	

128. A committee, chaired by Union Environment Minister Harsh Vardhan, has ..... wildlife clearance to the Mumbai-Ahmedabad high-speed train corridor that ..... upon a flamingo sanctuary and the Sanjay Gandhi National Park, home to leopards, in Mumbai.

Column I		**Column II**
A. Alienated		D. Encroaches
B. Estranged		E. Repelled
C. Accorded		F. Admonish
(a) A-F	(b) B-D and A-E	(c) C-F
(d) C-D	(e) B-E	

129. The CBI says there was no proper response to the earlier ..... it sent to the Police Commissioner, and alleges that he could have destroyed evidence that was initially gathered by the Special Investigation Team that he had ..... in the initial stage of the probe.

Column I		**Column II**
A. Declaration		D. Supervised
B. Summonses		E. Govern
C. Command		F. Administered
(a) A-D	(b) C-E	(c) B-E
(d) B-F and C-E	(e) B-F and B-D	

130. Following Taylor, we can rightly wonder why political power should be exercised, implemented and ..... without rules. Assertions of political power ..... affect our interests and our projects.

Column I	Column II
A. fickle	D. sabotage
B. executed	E. adversely
C. finished	F. negatively

(a) A-E (b) C-D (c) A-C and B-E
(d) B-E (e) C-F

Directions (131-135): In the following questions, a grammatically correct and meaningful sentence is given which is divided into five parts, (A),(B),(C),(D) and (E). Part (E) is fixed and highlighted in BOLD. You have to arrange the other four parts to make a contextually and grammatically meaningful sentence (the meaning can be different from the one given in the question). If no such rearrangement is possible mark (e) as your answer i.e. 'No rearrangement is possible'.

131. of formal and informal rules, assure (A)/according to some norms that enable as well as (B) / institutions, as the embodiment (C)/ citizens that the government exercises power (D) /**regulate state capacity (E).**
(a) ACBDE (b) CADBE (c) DABCE
(d) BACDE (e) BDCAE

132. British rule, secularism was an article of faith across(A)/ the ideological spectrum, though only in a limited definition as (B) / the community-based template of political competition introduced under (C) / in the aftermath of Partition, seen as the outcome of (D)/**a seamless sense of national identity**. (E)
(a) BADAE (b) CBDAE (c) ACBDE
(d) DCABE (e) CABDE

133. the exclusion was not based on gender or sex, but on religious (A) / by veteran lawyer K. Parasaran, sought a (B) / the Nair Service Society, represented (C)/ review of the verdict on the ground that (D) /**faith in and character of the deity. (E)**
(a) DACBE (b) ABDCE (c) CBDAE
(d) BCDAE (e) CBADE

134. represented by Solicitor General Tushar Mehta, (A) / while Mr. Venugopal said he did not (B) /on Mr. Bhushan, the government, (C)/ want the court to impose any punishment (D) /**was of the opposite opinion. (E)**
(a) DABCE (b) BDCAE (C) CDABE
(d) ABCDE (e) CDBAE

135. deposit-taking activities altogether, by making them an offence (A) /the principle is that the Bill would ban unregulated (B) / framework that only comes into effect (C) / ex-ante rather than the existing legislative-cum-regulatory (D) /**ex-post with considerable time lags. (E)**
(a) ADCBE (b) BACDE (c) CDBAE
(d) DABCE (e) BADCE

Directions (136-140): In the questions given below five words are given in which four of them have a similar meaning and one word is the antonym for the other four words. Choose the word, opposite in meaning to the other four, as your answer.

136. (a) incommensurate
(b) inordinate
(c) unsymmetrical
(d) proportionate
(e) lopsided

137. (a) Dissipate (b) Lavish (c) Splurge
(d) Squander (e) Retrieve

138. (a) fractious (b) affable (c) grouchy
(d) bad-tempered (e) shrewish

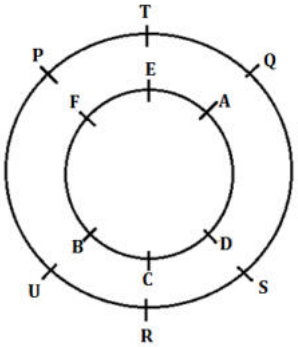
139. (a) conciseness (b) eloquence (c) rhetoric
(d) magniloquence (e) blarney

140. (a) eradicate (b) exterminate (c) abolish
(d) ratify (e) quash

Solutions

REASONING ABILITY

Direction (1-4):



1. (d); 2. (e); 3. (a);

4. (e);

5. (a);

Floors	Persons
6.	D
5.	F
4.	B
3.	A
2.	C
1.	E

6. (c); ALIGNED, DEALING

Directions (7-9):

In the given Input-Output question the logic is—
For step I- All the digits of the given numbers are arranged in ascending order within the numbers.
For Step II- All the numbers obtained in step I are arranged in ascending order from the left end.
For Step III- First and last digits of the numbers are omitted.
For step IV- The digits of the numbers obtained in step III are added.

INPUT— 3846 9213 8273 7341 5218 3285 6925 4758
STEP I- 3468 1239 2378 1347 1258 2358 2569 4578
STEP II- 1239 1258 1347 2358 2378 2569 3468 4578
STEP III- 23 25 34 35 37 56 46 57
STEP IV- 5 7 7 8 10 11 10 12

7. (c); 8. (c); 9. (d);

10. (c); Statement I is neutral as it is nowhere related to the recruitment process. While II strengthen the statement as the company is taking this step to strengthen the recruitment process.

Directions (11-14):

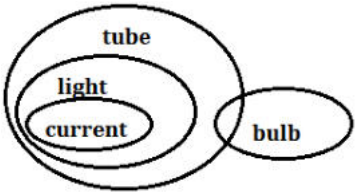
Box	Chocolate
Q	175
S	250
T	190
U	210
P	280
R	119

11. (a); 12. (b); 13. (d);

14. (d);

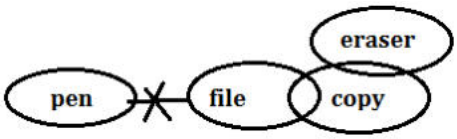
Directions (15-17):

15. (c);



16. (d);

17. (d);



Direction (18-21):

Years	Ages	Persons	Colour
1946	73	M	White
1958	61	L	Red
1963	56	K	Yellow
1971	48	N	Orange
1994	25	J	Pink
2006	13	O	Black

18. (d); 19. (c); 20. (d);

21. (a);

22. (c);

N	Q	L/O	M	O/L	P

23. (d); 24. (c);

Direction (25-28):

Months↓/Date→	5th	12th	21st
March (31)	K	C	H
May (31)	D	F	L
September (30)	J	E	B
November (30)	A	M	G

25. (a); 26. (d); 27. (d);

28. (d);

29. (e);

0	1	2	3	4	5	6	7	8	9
A	A	B	A	B	C	A	B	C	D

30. (d); I. MBEKTYD - BDEKMTY
II. GP**N**A**Q**US - AG**N**P**Q**SU
III. XCJRHO – CHJORX

31. (d); Only Statement III is assumed from the given statement. As from given statement it can be assumed that the extra class will help the students to score well.

32. (b); Both II and III can be the reason for the average salary remain same.

33. (e); Both III and IV can be inferred from the given statement as it is clear that the turnover is below 32.5 million currently and 35% of 1.5 lakh i.e. 52500 newly hired employee in new unit the turnover will reach to 32.5 million.

Direction (34-37):

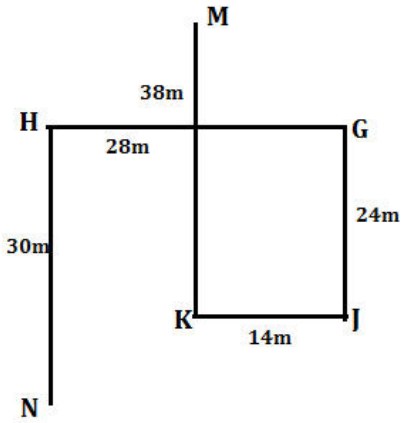
Persons
A
Z
D
H
B
Q
G
Y
R
L

Amount earn by them-
B(10000) > L(8500) > A(7000) > Z(5000) = H>R(4500) =Q=G > D(3000)=Y

34. (b); **35. (b);** **36. (a);**

37. (a);

Direction (38-40):



38. (e); **39. (b);** **40. (c);**

Directions (41-45):

41. (b); Condition (i) and (iii) is applied = AMGFIS = '6@27@6'.

42. (d); Condition (ii) and (iv) is applied = PUGRLE = '212#2&'.

43. (a); Condition (ii) and (v) is applied = UAIMUI = '@&9@µ&'.

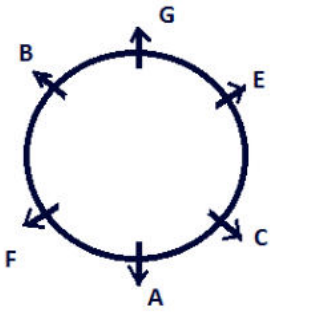
44. (e); Condition (iv) and (v) is applied = MJGLBF = '©2$272'.

45. (c); Condition (iv) and (v) is applied = GFPQMB = '7%3%5%'.

46. (c); In the above question we have to find the inference of the above statement.
For I-This cannot be the inference because if a person does not have Aadhar, he/she will not get government help in treatment but can take treatment of TB without Aadhar.
For II-This could be the inference as mentioned in the given statement that patients need Aadhar card to get benefits under government scheme.
For III-This also could be the inference because it is clear from the given statement that to get benefits of the scheme verification of Aadhar will be required.
For IV-This is not the inference of the given statement because this statement states that cases of TB patients increased in India now which is not directly related to the statement.

47. (c); For I- This argument does not holds strong because this initiative is for girls to get benefited initially but it is not like that education will be free for everyone.
For II-This argument also holds strong because a law/scheme or bill should not be for any particular gender but it should be for the one who really need it.
For III-This is also strong because gender should not be the criterion for the free education. It is the poor who should get the benefits.

Directions (48-50):



B > G > A > F > C > E
24yrs 20 yrs

48. (e); **49. (d);** **50. (b);**

QUANTITATIVE APTITUDE

51. (a); Efficiency ratio of A and B = 2: 1
QUANTITY 1: Time taken by B = $\frac{3}{1} \times \frac{15}{2}$
= $\frac{45}{2}$ days
QUANTITY 2: Efficiency of C = $2 \times \frac{3}{2} = 3$
∴ Time taken by C = $\frac{45}{2} \times \frac{1}{3} = \frac{15}{2}$ days
QUANTITY 1 > QUANTITY 2

52. (c); Quantity 1: Let roots are a_1, a_2 then $a_1 a_2 = \frac{-5}{2}$
$\Rightarrow a_2 = \frac{-5}{2}$ ($\because a_1 = 1$)
Quantity 2: 2.5
∴ Quantity 2 > Quantity 1

53. (a); Quantity 1:
Favorable cases
= (1, 4), (2, 3), (3, 2), (4, 1), (5, 5), (4, 6), (6, 4)
= 7
∴ Required prob. = $\frac{7}{36}$
Quantity 2: $\frac{1}{6}$
Quantity 1 > Quantity 2

54. (a); D + h = 28 m.
Quantity 1 : 7x = 28
x = 4
r = 8 m
h = 12 m
Curved surface area of cylinder = 2π ×8×12
= 2π × 96 m^2
Quantity 2:
h=10m
Radius = $\frac{28-10}{2}$ = 9 m
Curved surface area of cylinder = 2π ×9×10
= 2π× 90 m^2
Quantity 1 > Quantity 2

55. (e); There will be two numbers 73 and 37 whose product of digits is 21
So if we take 73 then
Quantity 1 > Quantity 2
And if we take 37 then,
Quantity 2 > Quantity 1
So no relation can be established.

56. (c); Let initially milk and water in container B is 3x liter and x liter respectively
Now,
$3x + \frac{8}{9} \times 18 - x - \frac{1}{9} \times 18 = 30$
3x + 16 – x – 2 = 30
x = 8
Initial quantity is container B = 8 (3 + 1)
= 32 Liter

57. (c); Total runs scored by team B = 30 × 4.5 + 20 × 5.5 − 10 = 235
∴ Required answer = $\frac{235}{50} = 4.7$

58. (b); Total balls = 40
Red balls = 18
Let green balls are x
Then, $\frac{18}{40} \times \frac{x}{39} = \frac{3}{26} \Rightarrow x = 10$
∴ No. of blue balls = 40 − 28 = 12

59. (e); Ratio of efficiency of A to B is 3 : 2
Let, In 8 days they complete = (3 + 2) × 8 = 40 units
So, total work = 40 × $\frac{12}{5}$ units
Time taken by B alone to complete whole work
= $\frac{40 \times 12}{5 \times 2}$ = 48 days

60. (d); Total employee working in A in year 2000
= 64 × $\frac{100}{32}$ = 200
Total employee working in A at the end of 2002
= (200 – 20 + 102 − 32 + 78 − 24) = 304
Total employee working in B at the end of 2002
= (96 −18 + 72 − 16) = 134
Required percentage = $\frac{134}{304} \times 100$
= 44.07 ≈ 44%

61. (b); Let total employee who left B and C in the year 2002 be 7a and 9a respectively
ATQ –
172 + 84 – 36 + 108 − 9a + 124 − 28 = 406
9a = 424 − 406
9a = 18
a = 2
Employee left B in 2002 = 14
So, total employee working in B at the end of 2002 = 160 + 96 −18 + 72 − 14 = 296

62. (a); Total employee working in B at the end of 2000
= 220 −28 + 32 = 224
Let total employee left B in 2002 & 2003 together be 6x & 7x respectively
ATQ –
224 + 96 – 18 + 72 − 6x + 144 − 7x = 466
13x = 518 − 466
13x = 52
So, total 52 employees left B in 2002 & 2003 together.

63. (c); Total employee left A in the given three years
= 21 × 3 = 63
Total employee left A in 2001 & 2003 together
= 63 – 24 = 39

Total employee left A in 2001 = $39 \times \frac{7}{13} = 21$
Total employee working in A at the end of 2002
= 102 – 21 + 78 − 24 = 135
Required percentage = $\frac{135-108}{108} \times 100$
= $\frac{27}{108} \times 100$ = 25%

64. (e); Total employee left C in the year 2002 = $24 \times \frac{4}{3}$ = 32
Total employee left B in the year 2002 = $32 \times \frac{5}{8}$ = 20
Total employee working in A at the end of 2002
= 102 – 22 + 78 − 24 = 134
Total employee working in B at the end of 2002
= 96 −18 + 72 − 20 = 130
Total employee working in C at the end of 2002
= 84 −36 + 108 − 32 = 124
Required ratio = 130 : 124 : 134 = 65 : 62 : 67

65. (a); Total employee left A in year 2001 = $36 \times \frac{1}{3} = 12$
Total employee left C in year 2002
= $(36 - 12) \times \frac{2}{3} = 16$
Total employee working in A at the end of 2002
= 102 −12 + 78 − 24 = 144
Total employee working in C at the end of 2003
= 84 −36 + 108 − 16 + 124 − 28 = 236
Required difference = 236 – 144 = 92

66. (a); **I.** $2x^2 + 11x + 15 = 0$
$\Rightarrow 2x^2 + 6x + 5x + 15 = 0$
$\Rightarrow 2x(x + 3) + 5(x + 3) = 0$
$\Rightarrow (x + 3)(2x + 5) = 0$
$\Rightarrow x = -3, -5/2$
II. $4y^2 + 13y + 9 = 0$
$\Rightarrow 4y^2 + 4y + 9y + 9 = 0$
$(y + 1)(4y + 9) = 0$
$\Rightarrow y = -1, -9/4$
$y > x$

67. (e); **I.** $x^2 - 36x + 324 = 0$
$\Rightarrow x^2 - 18x - 18x + 324 = 0$
$\Rightarrow (x - 18)^2 = 0$
$\Rightarrow x = 18, 18$
II. $y^2 - 35y + 216 = 0$
$\Rightarrow y^2 - 27y - 8y + 216 = 0$
$\Rightarrow (y - 27)(y - 8) = 0$
$\Rightarrow y = 27, 8$
No relation

68. (c); **I.** $x = (216)^{1/3} \Rightarrow x = 6$
II. $y^2 = 6 \Rightarrow y = \pm\sqrt{6}$
$x > y$

69. (a); **I.** $2x^2 + 17x + 35 = 0$
$2x^2 + 10x + 7x + 35 = 0$
$2x(x + 5) + 7(x + 5) = 0$
$(2x + 7)(x + 5) = 0$
$x = \frac{-7}{2}, -5$

II. $3y^2 + 17y + 24 = 0$
$3y^2 + 9y + 8y + 24 = 0$
$3y(y + 3) + 8(y + 3) = 0$
$(y + 3)(3y + 8) = 0$
$y = -3, -\frac{8}{3}$
$y > x$

70. (d); **I.** $x^2 + 72 = 108$
$x^2 = 108 - 72 = 36$
$x = \pm 6$
II. $y^3 + 581 = 365$
$y^3 = -216$
$y = -6$
$x \geq y$

71. (b); **I.** $8x^2 + 58x + 39 = 0$
$8x^2 + 52x + 6x + 39 = 0$
$4x(2x + 13) + 3(2x + 13) = 0$
$x = (-13)/2, (-3)/4$
II. $8y^2 - 14y - 15 = 0$
$8y^2 - 20y + 6y - 15 = 0$
$4y(2y - 5) + 3(2y - 5) = 0$
$y = 5/2, (-3)/4$
$y \geq x$

72. (b); Total unsubscribed viewers from B
= $3000 \times \frac{15}{100} - 250 = 200$
Total unsubscribed viewers from E
= $3000 \times \frac{20}{100} - 180 = 420$
Total unsubscribed viewers from C
= $3000 \times \frac{28}{100} - 440 = 400$
Required percentage = $\frac{(200+420)-400}{400} \times 100$
= $\frac{220}{400} \times 100$ = 55%

73. (b); Let total female unsubscribed viewers in D be 3x
So, total male unsubscribed viewers in D will be 5x
Total male unsubscribed viewers in D
= $(3000 \times \frac{25}{100} - 350) \times \frac{5x}{8x} = 250$
Total unsubscribed viewers in A & C
= $(3000 \times \frac{12}{100} - 220) + (3000 \times \frac{28}{100} - 440)$
= 140 + 400 = 540
Required ratio = $\frac{250}{540}$ = 25 : 54

74. (e); Total unsubscribed viewers from B
= $3000 \times \frac{15}{100} - 250 = 200$
Total unsubscribed viewers from C
= $3000 \times \frac{28}{100} - 440 = 400$
Total unsubscribed viewers in B & C and subscribed viewers in E = 200 + 400 + 180 = 780
Required central angle = $\frac{780}{3000} \times 360$
= 93.6°

75. (d); Total female viewers in village C
$= 3000 \times \frac{28}{100} \times \frac{325}{7} \times \frac{1}{100} = 390$
Total female unsubscribed viewers in village C
$= 390 \times \frac{7}{13} = 210$
Total male unsubscribed viewers in village C
$= (3000 \times \frac{28}{100} - 440) - 210 = 190$

76. (b); Total subscribed viewers from village F
$= (3000 \times \frac{12}{100} - 220) \times \frac{120}{100} = 168$
Total unsubscribed viewers from village F
$= 168 \times \frac{4}{3} = 224$
Total unsubscribed viewers from C
$= 3000 \times \frac{28}{100} - 440 = 400$
Required percentage $= \frac{400 - 224}{400} \times 100$
$= \frac{176}{400} \times 100 = 44\%$

77. (c); Total viewers from all the five village in 2018
$= 3000 \times \frac{140}{100} = 4200$
Total subscribed viewers from A in 2018
$= 220 \times 1.25 = 275$
Total subscribed viewers from B in 2018
$= 250 \times 1.2 = 300$
Total subscribed viewers from D in 2018
$= 350 \times 1.14 = 399$
Total subscribed viewers from E in 2018
$= 180 \times 1.1 = 198$
Total subscribed viewers from C in 2018
$= 1400 - (275 + 300 + 399 + 198) = 228$
Total unsubscribed viewers from C in 2018
$= 4200 \times \frac{28}{100} - 228 = 948$

78. (c); Let rate of interest for both scheme be R%
So,
Amount after 3 years $= 8000 + \frac{8000 \times 3R}{100}$
$= 8000\ (1 + \frac{3R}{100}) = 80(100+3R)$
And
$80\ (100+3R) = 9000\ (1 + \frac{R}{100})^2$
(from this R can be calculated)
We don't have to solve complete question
We can see that R can be calculated from
$80\ (100+3R) = 9000 \left(1 + \frac{R}{100}\right)^2$
Both the statements taken together are necessary to answer the questions

79. (d); From A –
One man $= \frac{3}{2}$ women
Total work $= \left(\frac{3}{2} \times 4 + 18\right) \times 2.5 = 60$ units
So, 12 women can complete the work $= \frac{60}{12}$
$= 5$ days
From B –
$(4m + 18w) \times 2.5 = (6m + 6w)4$
$14m = 21w$
One man = 1.5 woman
Total work $= (4 \times 1.5 + 18) \times 2.5 = 60$ units
So, 12 women can complete the work $= \frac{60}{12}$
$= 5$ days
So, Either statement A or statement B alone is sufficient to give answer of the question.

80. (d); From A –
Let speed of stream be 'y' km/hr
$\frac{120}{22.5-y} = 4 + \frac{120}{22.5+y}$
$y = 7.5$ km/hr
From B –
Let speed of stream be 'a' km/hr
$\frac{150}{22.5+a} + \frac{150}{22.5-a} = 15$
$y = 7.5$ km/hr
So. Either statement A or statement B alone is sufficient to give answer of the question.

81. (e); Form A –
Given, X & Y both are integer and both are multiple of 24 and X is 50% more than Y
So, X & Y can be (72, 48) , (216 , 144) and so on ……
So, data A alone not sufficient to give answer of the question
From B –
Given, . $\frac{X}{30}$ & $\frac{Y}{40}$ both are natural number
But, we can not calculate the value of X & Y
From A & B –
X & Y can be (720, 480) , (2160 , 1440) and so on

So, Statements **A** and **B** taken together are not sufficient to answer the question

82. (a); Let students who take art and science be 4b & b respectively
Total students who take commerce = (2a + 16) $- (4b + b) = (2a + 16 - 5b)$
From A –
$4b - (2a + 16 - 5b) = 8$
$-2a + 9b = 24$ … (i)
Also, $\frac{b}{(2a+16)} = \frac{1}{8}$
$-2a + 8b = 16$ … (ii)
$b = 8$
Total students in class = 64
From B –
$(2a + 16 - 5b) \times \frac{75}{100} = 4b$ … (i)
$6a + 48 - 15b = 16\ b$
$31b = 6a + 48$
$b = \frac{6a+48}{31}$
So, from statement I only.

83. (b); Total boys take admission in college B & D together= $(10.5 \times \frac{64}{100} + 18 \times \frac{68}{100}) \times 1000$
= 6720 + 12240 = 18960
Total boys take admission in E
$= 16 \times \frac{60}{100} \times 1000 = 9600$
Required percentage = $\frac{18960-9600}{9600} \times 100$
$= \frac{9360}{9600} \times 100 = 97.5\%$

84. (a); Total girls appeared in exam from A
$= 12000 \times \frac{44}{100} \times \frac{75}{100} = 3960$
Total girls appeared in exam from C
$= 9000 \times \frac{48}{100} \times \frac{80}{100} = 3456$
Total boys appeared in exam from A & C together
$= 17910 - (3960 + 3456) = 10494$
Total boys appeared in exam from C
$= 10494 - 6048 = 4446$
Total boys who did not appear in exam from A
$= 12000 \times \frac{56}{100} - 6048 = 672$
Total boys did not appear in exam from C
$= 9000 \times \frac{52}{100} - 4446 = 234$
Required difference = 672 −234 = 438

85. (d); Total boys taken admission in college A & B = $12000 \times \frac{56}{100} + 10500 \times \frac{64}{100}$
= 6720 + 6720 = 13440
Total girls taken admission in D & E together = $18000 \times \frac{32}{100} + 16000 \times \frac{40}{100}$
= 5760 + 6400 = 12160
Required ratio = 13440 : 12160 = 21 : 19

86. (c); Total girls taken admission in F
$= 9000 \times \frac{48}{100} \times \frac{13}{8} = 7020$
Total boys taken admission in college F
$= 20580 - 16000 \times \frac{60}{100}$
= 20580 −9600 = 10980
Required percentage = $\frac{7020}{(7020+10980)} \times 100$
$= \frac{7020}{18000} \times 100 = 39\%$

87. (c); Students taken admission in science stream from B = $10500 \times \frac{2}{7} = 3000$
Students taken admission in commerce stream from B = $10500 \times \frac{1}{7} = 1500$
Students taken admission in art stream from B
$= 10500 \times \frac{4}{7} = 6000$
Total boys taken admission in art stream from college B = $6000 - 10500 \times \frac{36}{100} \times \frac{35}{100} = 4677$
Total boys taken admission in science stream from college B = $3000 - 10500 \times \frac{36}{100} \times \frac{40}{100}$
= 1488
Required difference = 4677 −1488 = 3189

88. (a); Total boys taken admission in college A
$= 12000 \times \frac{56}{100} = 6720$
Total boys taken admission in college B
$= 10500 \times \frac{64}{100} = 6720$
Total boys taken admission in college C
$= 9000 \times \frac{52}{100} = 4680$
Total boys taken admission in college D
$= 18000 \times \frac{68}{100} = 12240$
Total boys taken admission in college E
$= 16000 \times \frac{60}{100} = 9600$
Required ratio = $\frac{6720+6720+4680+12240+9600}{5}$
$= \frac{39960}{5} = 7992$

89. (d); Volume of the cylindrical ditch = $\pi r^2 h$
$= \frac{22}{7} \times 7 \times 7 \times 2 = 308\ m^2$
Area of remaining field = $(X - \pi r^2)\ m^2$
$= (X - 154)\ m^2$
ATQ –
$(X - 154) \times 0.77 = 308$
$(X - 154) = 400$
$X = 554\ m^2$

90. (a); Let man invested Rs. A
And, after two years amount invested = $(A + \frac{A}{2})$
$= \frac{3A}{2}$ Rs.
Equivalent CI of two year at 10% p.a.
$= 10 + 10 + \frac{10 \times 10}{2} = 21\%$
ATQ –
$A \times \frac{21}{100} + (A + \frac{21A}{100} + \frac{A}{2}) \times \frac{10}{100} = 457.2$
0.210A + 0.171A = 457.2
0.381A = 457.2
A = 1200 Rs.
Required amount =$1200 + 1200 \times \frac{15 \times 3}{100}$
= 1740 Rs.

91. (d); Investment ratio of A, B & C = $(4000 \times 6 + 3000 \times 9) : (5500 \times 6 + 4000 \times 9) : 4x \times 9$
= 51000: 69000 : 36x
= 8500 : 11500 : 6x
ATQ –
$\frac{6x}{(20000+6x)} \times 12250 = 2250$
x = 750
investment of C= Rs 3000

92. (c); Let length of train A be 'L' m and speed be 'V' m/s
ATQ –
$V = \frac{L}{8}$ ... (i)
And, $V = \frac{L+180}{17}$ ... (ii)
From (i) & (ii)

$\frac{L}{8} = \frac{L+180}{17}$
$17L - 8L = 1440$
$L = 160$ m
And $V = 20$ m/s
Let length of train B be 'S'
So, $\frac{108}{18} \times 5 + 20 = \frac{160+S}{8}$
$S = 400 - 160$
$S = 240$ m
Let time taken by train B to cross platform P be t sec
So, $\frac{108}{18} \times 5 = \frac{240+180}{t}$
$t = \frac{420}{30} = 14$ sec

93. (a); Let the selling price for each of the shopkeeper be Rs 100x
For 1st shopkeeper
SP= Rs 100x
CP=100x $\times \frac{75}{100}$ = Rs 75x
For 2nd shopkeeper
SP= Rs 100x
CP=100x $\times \frac{100}{125}$ = Rs 80x
ATQ,
$\Rightarrow 25x - 20x = $ Rs. 175
$\Rightarrow x = 35$
Sum of cost price= Rs 5425

94. (b); Let the present age of Ayush be x yr.
Present age of his son = $\frac{x-6}{4}$ yr
Present age of his daughter= $\left(\frac{x-6}{4} + 7\right)$ yr
Present age of his wife
$= (x + 10) - \left\{\left(\frac{x-6}{4} + 7\right)\right\} = \frac{3x+18}{4}$ yr
ATQ
$x + \frac{x-6}{4} + \left(\frac{x-6}{4} + 7\right) + \frac{3x+18}{4} = 121$
$x = 50$ yr

95. (d); Let cost price of each bread packet = a Rs.
So, marked price of each bread packet = 2.5a
And selling price of each bread packet = 2.5a $\times \frac{60}{100}$ = 1.5a
Given, 1.5a – a = 30
a = 60 Rs.
New selling price = 2.5a $\times \frac{5}{8} = 1.5625a$
Selling price of one bread packet = $1.5625 \times 60 = 93.75$
Required profit on selling 80 bread packets
$= (93.75 - 60) \times 80 = 2700$ Rs.

S(95 –100):
Given , Commission received by the distributor = 7000 Rs.
So, the number of bottles sold by distributor = $\frac{7000}{1000} \times 50 = 350$
Total number of bottles received by him in the whole stock to sell = 350 + 40 = 390
Production cost of each bottle = $\frac{780000}{390}$ = 2000 Rs.
Marked price of each bottle = $2000 \times 1.3 = 2600$ Rs.
Total selling price of 350 bottles = 350 × 2000 + 140000 = 840000 Rs.
Selling price of each bottles = $\frac{840000}{350}$ = 2400 Rs.
Discount allow by employee (y) = $\frac{2600-2400}{2600} \times 100$
$= \frac{200}{2600} \times 100 = 7\frac{9}{13}\%$

96. (b); $Y = 7\frac{9}{13}\%$

97. (d); Required ratio = $\frac{\frac{100}{13}}{390} = \frac{100}{13 \times 390} = 10 : 507$

98. (a); New selling price of one bottle = $2600 \times \frac{90}{100}$
$= 2340$
Required profit % = $\frac{2340-2000}{2000} \times 100 = 17\%$

99. (b); Total stock which another distributor sold
$= (350 + 450) = 800$
Total commission received by another distributor = $\frac{800}{50} \times 1000 = 16000$ Rs.
New cost price of one bottle = $2000 + \frac{16000}{800}$
= 2020 Rs.

100. (a); Selling price = $2600 \times \frac{95}{100} \times \frac{7}{8} = 2161.25$ Rs.
Required profit = $2161.25 - 2000 = 161.25$ Rs.

ENGLISH LANGUAGE

101. (d); Suffice- be enough or adequate.
Serve- be enough for.
Disperse- distribute or spread over a wide area.
Dissipate- (with reference to a feeling or emotion) disappear or cause to disappear.
Squander- waste (something, especially money or time) in a reckless and foolish manner.
Among the given options, the option (d) 'serve' is the most appropriate word to fill the blank. Hence, the option (d) is the correct answer.

102. (a); Among the given options, only option (a) conveys the meaning that supports the given statement in the passage. Option (a) conveys that if you connect words just to create an effect,

that is not poetry, it just includes the one factor which is 'intelligence' but it is devoid of the other factor which is 'skill.'
Hence, the option (a) is the correct answer.

103. (b); The hint for the answer is derived from the paragraph where it is given as "considering something like IQ to be a sufficient index of human mental capacity!" An intelligence quotient (**IQ**) is a total score derived from several standardized tests designed to assess human intelligence. Option (d) is out of context hence can be omitted easily. Only option (b) has talked about the 'human intelligence.'
Hence, the option (b) is the correct answer.

104. (c); The position of (2) (intelligence) and (3) (different) seems correct, but the words 'activity' and 'failures' seem to be incorrectly placed. Hence, upon interchanging 1-4, we get the sentence, grammatically and contextually correct and meaningful, repectively. The sentence thus formed will be, "One of the major failures here is that of considering intelligence to be something different from and raised above the activity of living."
Hence, the option (c) is the correct answer.

105. (b); relegated- assign an inferior rank or position to
The hint for the answer can be derived from the line itself. "This leads to the misconception that intelligence can be …….. to something else — say, a robot — without becoming something else."
It explains that there is a misconception that a robot can replace the 'intelligence' or 'intelligence' can be degraded to a lower position. Among the given options, the word 'relegated' gels well with the theme of the paragraph and makes the sentence grammatically and contextually correct and meaningful, respectively. Hence, the option (b) is the correct answer.

106. (b); Virtues- behaviour showing high moral standards.
fortes- a thing at which someone excels.
Gentry- people of good social position, specifically the class of people next below the nobility in position and birth.
Rage- violent uncontrollable anger.
Among the given options, the option (b) 'fortes' is the most appropriate word to fill the blank.
Hence, the option (b) is the correct answer.

107. (c); (I) We expect individuals to be their own leaders, to take charge of their lives, to assume responsibility for their decisions.
(II) A person who merely coordinates the actions of others or has management skills is not a leader.
(III) I suppose there is little new one can say on this matter.
BCA will be the correct sequence. Hence, the option (c) is the correct answer.

108. (b); Entails- involve (something) as a necessary or inevitable part or consequence.
Arouse- evoke or awaken (a feeling, emotion, or response).
Sheers- a very fine or diaphanous fabric or article.
Garners- gather or collect (something, especially information or approval)
The given line in the passage conveys that to be a good leader it is necessary to put forth the collective interest first instead of her/his own interest. Hence, the option (b) is the correct answer.

109. (d); Among the given options, only option (d) gels well with the preceding and the following sentences of (C). The rests seem out-of-context.
Hence, the option (d) is the correct answer.
"Since this intellectual formulation can only be the first step, an estimate of the real quality of a decision is not known until it is implemented; Its deficiencies begin to show up only when put into practice. This requires him to keep his ear to the ground, listen patiently to criticism to judge if his policies are working."

110. (e); The given sentence is grammatically correct and contextually meaningful and doesn't require any changes. Hence, the option (e) 'no error' is the correct answer.

111. (c); Collusion- secret or illegal cooperation or conspiracy in order to deceive others.
Commotion- a state of confused and noisy disturbance.
Concession- a thing that is granted, especially in response to demands.
Digression- a temporary departure from the main subject in speech or writing.
It is evident from the whole passage that author is talking about the idea of reconsideration of angel tax on start-ups. Only option (c) has a meaning which fits best in the given blank as per the context of the passage. Hence, the option (c) is the correct answer.

112. (d); Norms- something that is usual, typical, or standard.
Among the given options, the option (d) 'standards' is the most appropriate word to fill the blank. Hence, the option (d) is the correct answer.

113. (d); BAC will be the correct choice as it will make all the three sentectes grammatically and contextually correct.

(i) The tax, which was first introduced in 2012 to curb money-laundering through the **sale of shares of private unlisted companies** at bloated prices, has caused a lot of anguish among start-up investors in the country.

(ii) For its part, the IT department fears that start-ups may be used as convenient tools to launder illegally acquired money, so a tax on investments beyond a certain threshold is **necessary to deter such shady operations.**

(iii) The broad-brush tax on all investments means an unnecessary cost is imposed **on the wider start-up** community simply because of the lack of better means at the government's disposal to tackle black money.

BAC will be the correct sequence. Hence, the option (d) is the correct answer.

114. (e); The positions of (2) (benefits), (4) (justifiable) and (1) (unintended) and (3) (intent) seems to be incorrectly placed. Hence, upon interchanging 2-4 and 1-3 we get the sentence which is grammatically and contextually correct and meaningful, respectively. "But while the intent of such an angel tax may be justifiable, the arbitrary nature of it means the cost of unintended consequences could be larger than the supposed benefits"
Hence, the option (e) is the correct answer.

115. (c); Based on the information given in the passage, among the given options, only option (c) best describes the term 'angel investor.' The line given in the passage, "For its part, the IT department fears that start-ups may be used as convenient tools to launder illegally acquired money, so a tax on investments beyond a certain threshold is necessary to deter such shady operations" gives an idea that angel investors are those who provide capital for a business start-up.
Hence, the option (c) is the correct answer.

116. (c); B-D can replace each other and form a meaningful sentence. "Abroad" and "overseas" can here be used interchangeably as they imply similar meaning and can be used at each other's place without altering the actual context of the sentence.
"Diaspora" is the spreading out of group of the people belonging to similar identity/ nation.

117. (b); A-B can replace each other and form a meaningful sentence."Police" and "Magistrates" can be exchanged as they do not alter the actual meaning of the given statement. Also, "perpetrators" which means people who carries out a harmful, illegal, or immoral act and "public" can not replace other highlighted words of the sentence.

118. (e); No interchange is possible. As none of the given highlighted words can substitute each other, there is no scope for using the words interchangeably without altering their meaning.

119. (e); No interchange is possible. As none of the given highlighted words can substitute each other, there is no scope for using the words interchangeably without altering their meaning.

120. (d); C-D can replace each other and form a meaningful sentence. Here, "Enforcement Directorate" and "Police" can be interchanged as the statement mentions about a whole lot of bureaucrats and police. Thus placing Enforcement Directorate and Police at each others position will imply the similar meaning.
Also, "tampered" which implies interfere with (something) in order to cause damage or make unauthorized alterations and "authority" cannot replace any other highlighted words within the statement.

121. (e); In the given sentence, "Dispensation" implies a political, religious, or social system prevailing at a particular time which is similar to II. In statements I and III, "Dispensation" is used in context of exemption from a rule or usual requirement.
Hence, option (e) is the correct answer.

122. (b); In the given sentence "sordid" means something involving immoral or dishonourable actions and motives which is similar to the I and III. Whereas, in statement II, sordid implies something dirty or squalid.
Hence, option (b) is the correct answer.

123. (c); In the given sentence promoted is used in context of supporting or actively encouraging something for its further progress which is similar to the statements given in II and III. Whereas, in statement I, promoted implies to raise (someone) to a higher position or rank.
Hence, option (c) is the correct answer.

124. (d); In the given statement, resistance implies the refusal to accept or comply with something which is similar to the statements I and II. Whereas, in statement III, resistance is used in context of the degree to which a substance or device opposes the passage of an electric current.
Hence, option (d) is the correct answer.

125. (e); In the given statement, substantive has been having a firm basis in reality and so important, meaningful, or considerable. In Statements I, II and III, substantive imparts almost a similar meaning as given in the original sentence.

126. (c); B-F and A-E are the correct pair to be substituted in the blanks given within the statement. Appreciation and acknowledgement are synonymous to each other and fit the first blank perfectly. Similarly, diplomatic and strategic can be used interchangeably to define something that is related to diplomacy.

127. (c); A-E is the correct pair to be substituted in the blanks given within the statement. Here divulged implies make known/ revealing (private or sensitive information) and submitted is used in context of accepting to the authority.

128. (d); C-D is the correct pair to be substituted in the blanks given within the statement. Here accorded means give or grant someone (power, status, or recognition) and encroaches means intrude on/ trespass.
"Estranged" means no longer close or affectionate to someone which is also similar to "Alienated".
"Repelled" here implies drive or force (an attack or attacker) back or away.
"Admonish" means warn or reprimand someone firmly.

129. (e); B-D and B-F are the correct pair to be substituted in the blanks given within the statement. Here, "Summons" implies orders to appear before a judge or magistrate, or the writ containing such an order. Also, as the police commissioner had observed and directed the execution of investigation, both, "Supervised" and "Administered" can be used to fill in the second blank.

130. (d); B-E is the correct pair to be substituted in the blanks given within the statement. "Executed" here implies put (a plan, order, or course of action) into effect and "adversely" implies in a way that prevents success or development; harmfully or unfavorably. Therefore Executed and Adversely perfectly fit in the blanks given in the statement.
Also, here "fickle" implies changing frequently, especially as regards one's loyalties or affections and "sabotage" means deliberately destroy, damage, or obstruct (something), especially for political or military advantage.

131. (b); Option (b) is the correct choice as the given sequence is grammatically and contextually correct.
Institutions, as the embodiment of formal and informal rules, assure citizens that the government exercises power according to some norms that enable as well as regulate state capacity.

132. (d); Option (d) is the correct choice as the given sequence gives us a grammatically and contextually correct.
In the aftermath of Partition, seen as the outcome of the community-based template of political competition introduced under British rule, secularism was an article of faith across the ideological spectrum, though only in a limited definition as a seamless sense of national identity.

133. (c); Option (c) is the correct choice as the given sequence gives us a grammatically and contextually correct.
The Nair Service Society, represented by veteran lawyer K. Parasaran, sought a review of the verdict on the ground that the exclusion was not based on gender or sex, but on religious faith in and character of the deity.

134. (b); Option (b) is the correct choice as the given sequence **BDCAE** gives us a grammatically and contextually correct.
While Mr. Venugopal said he did not want the court to impose any punishment on Mr. Bhushan, the government, represented by Solicitor General Tushar Mehta, was of the opposite opinion.

135. (e); Option (e) is the correct choice as the given sequence **BADCE** gives us a grammatically and contextually correct.
The principle is that the Bill would ban unregulated deposit-taking activities altogether, by making them an offence ex-ante rather than the existing legislative-cum-regulatory framework that only comes into effect ex-post with considerable time lags.

136. (d); Incommensurate- out of keeping or proportion with.
Inordinate- unusually or disproportionately large; excessive.
Proportionate- corresponding in size or amount to something else.
Lopsided- with one side lower or smaller than the other.
Out of the given options only option (d) is opposite to the given word 'incommensurate', hence option (d) is the correct answer choice.

137. (e); Squander means waste (something, especially money or time) in a reckless and foolish manner.
Dissipate means (with reference to a feeling or emotion) disappear or cause to disappear.
Lavish means spent or given in profusion.
Retrieve means get or bring (something) back from somewhere.
Splurge means spend (money) freely or extravagantly.

138. (b); Fractious- irritable and quarrelsome.
Affable- friendly, good-natured, or easy to talk to.
Grouchy- irritable and bad-tempered; grumpy; complaining.
shrewish- bad-tempered or aggressively assertive.
Out of the given options only option (b) is opposite to the given word 'fractious', hence option (b) is the correct answer choice.

139. (a); Conciseness- usually implies that unnecessary details or verbiage have been eliminated from a more wordy statement an thus it might be ineffective.
Rhetoric- the art of effective or persuasive speaking or writing, especially the exploitation of figures of speech and other compositional techniques.
Out of the given options only option (a) is opposite to the given word 'rhetoric' and all other given options are synonyms to the given word. Hence option (a) is the correct answer choice.

140. (d); Here, "ratify" implies to sign or give formal consent to (a treaty, contract, or agreement), making it officially valid. Whereas, other mentioned words, eradicate, exterminate, abolish and annihilate can be used synonymously to destroy something completely; put an end to. Hence, option (d) is the correct choice.

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REASONING ABILITY

Directions (1-3): Study the following information and answer the questions given below:

There are seven given letters A, Y, E, R, S, P and L which are arranged from left to right with facing north direction. There are three letters between the S and E. There is only one letter between E and A. R is immediate left of S. Y is immediate left of E. P and L are adjacent to each other. L is not adjacent to R.

1. Who among the following is on extreme end?
(a) A, S (b) Y, S (c) A, P
(d) A, R (e) E, S

2. Who among the following is immediate right of P?
(a) R (b) L (c) E
(d) A (e) Y

3. Which letter is adjacent to E?
(a) Y, P (b) Y, L (c) A, S
(d) S, L (e) R, Y

Directions (4-6): Study the following alphanumeric series carefully and answer the questions given below:

7 A 6 P & R $ 4 Y Q % T @ 3 9 S I O 9 9 J L E U * K # 3

STEP I: The letters which are immediately preceded and immediately followed by a symbol are arranged in the end of the series in the alphabetical order. (They are arranged just after 3)

STEP II: The numbers which are immediately preceded by the letter and immediately followed by the Symbol are arranged between 9 and S in the increasing order.

STEP III: The numbers which are immediately followed by letter are interchanged its position with respect to the element just after it.

(STEP II is applied after STEP I and STEP III is applied after STEP II)

4. How many letters are arranged at the end of the series in the step-1?
(a) one (b) Three (c) Four
(d) Five (e) More than five

5. Which among the following are the elements of the series which are second position from the left end and fifth position from the right end in step-III?
(a) 63 (b) 7# (c) P#
(d) AK (e) 6#

6. How many symbols are immediately followed by numbers in step-III?
(a) one (b) Three (c) Four
(d) Five (e) Two

Directions (7-9): Study the following information carefully to answer the given question.

There are Some boxes which are arranged one above another such that one box is placed at the bottom and another box is placed just above that box and all are arranged in the same order.

Only two boxes are there in between Orange box and box U and Orange box is above box U. There is only one box in between box P and box S. Box S is of Purple color and is placed above box R. There are three boxes in between Orange box and Green box. Green box is placed below U, which is not of blue colour. Only one box is placed in between box R and Orange box. More than four boxes are placed in between box P and Orange box. There are as many as boxes placed between box S and the box which is of Orange colour and as many as between the box which is of orange colour and the box which is of green colour. The box which is of green colour is placed at the bottom. Not more than two boxes are placed in between box V and box S. Box R is placed just above the box of blue colour. Box V is not an immediate neighbor of Box S and Box P.

7. How many boxes are there in the arrangement?
(a) Ten (b) Eleven (c) Fourteen
(d) Twelve (e) None of these

8. How many boxes are there between box R and box U?
(a)Five (b)One (c) Four
(d) Two (e) None of these

9. Which box is immediately above Orange box?
(a) S (b) R (c) Purple box
(d) V (e) Green box

Directions (10-12): Study the following alphanumeric series carefully and answer the questions given below:

12AIFR 42WBOL 63EOCN 15TVMR 75GYTR

10. How many meaningful words can be formed from the letters of the words which are attached with the numbers in which At least one digit is even digit in the given alphanumeric series?
(a) one (b) two (c) three
(d) four (e) More than four

11. The words are arranged according to the descending order of the numbers which are attached to them from left to right, then how many alphabets are between the letters of second letter from the left end and seventh letter from the right end?
(a) one (b) two (c) three
(d) four (e) More than five

12. The letters which are attached with the numbers in which at least one is odd digit are arranged according to the ascending orders of their numbers from left to right and then all letters of the words together are arranged in the alphabetical order, then which of the following is the 9th letter from the right end?
(a) M (b) O (c) N
(d) R (e) None of these

Directions (13-15): Study the following information and answer the questions given below:

There are AB axis in such a way that A is in north and B is in south direction. There is XY axis in such a way that X is in west direction and Y is in east direction. AB axis and XY axis intersect at a point Q in such a way that AQ is 15m, QB is 17m, QX is 12m, QY is 24 m.

Mehul starts from point X and walks 20m in south direction and then he turns his left and walks 32m. Arun starts from point A and walks 20m in east direction. Raju starts from point Y and walks 5m in north direction and then he turns his left and walk 4m and again he turns his left and walks 22m.

13. Point B is in which direction with respect to Arun's current position?
(a) south (b) south-east (c) south-west
(d) west (e) north-west

14. Point Y is in which direction with respect to Mehul's current position?
(a) north (b) east (c) north-east
(d) north-west (e) south

15. What is distance between Raju's current position and Mehul's current position?
(a) 3m (b) 5m (c) 13m
(d) 22m (e) 27m

Directions (16-18): Study the following information and answer the questions given below:

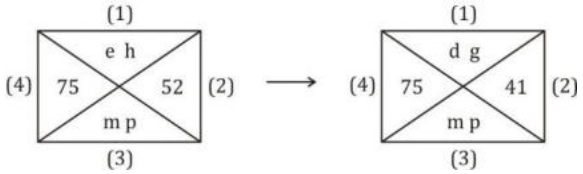
16. Four friends are sitting around a circular table named M, N, O and P. Are they facing to the centre of table? If-
I. N is sitting second to the right of P. P is facing centre. O is sitting immediate right of N and P.
II. M is sitting immediate left of N. O is not sitting immediate left of M. O is sitting immediate right of P.
III. P is sitting immediate of M and O. N is sitting immediate left of M. O is sitting immediate left of P.
(a) If the data in statement I and II are sufficient to answer the question, while the data in statement III are not sufficient to answer the question.
(b) If the data in statement II and III are sufficient to answer the question, while the data in statement I is not sufficient to answer the question.
(c) If the data in statement I alone or in the statement II alone or in the statement III alone is sufficient to answer the question.
(d) If the data in all the statement I, II and III are necessary to answer the question.
(e) If the data in statement I and III are sufficient to answer the question, while the data in statement II is not sufficient to answer the question.

17. Six people A, B, C, D, E and F are living in six floor building each live in one of apartment of building. In building there are from I to VI floor. Ground floors is given number I, then II and so on. Who is living on Ground floor?
I. In which floor C and B are living there is only one floor between them. A is living in even number floor.
II. E is not living in even number floor. B is living in even number floor. B is not living in top floor.
III. D is living in odd number floor. In which floor D and A are living, there are two floors between them. E is living immediate next to C from down.
(a) If the data in statement I and II are sufficient to answer the question, while the data in statement III are not sufficient to answer the question.
(b) If the data in statement I and III are sufficient to answer the question, while the data in statement II is not sufficient to answer the question.
(c) If the data in statement II and III are sufficient to answer the question, while the data in statement I is not sufficient to answer the question.
(d) If the data in all the statement I, II and III are necessary to answer the question
(e) If the data in statement I alone or in the statement II alone or in the statement III alone is sufficient to answer the question.

18. Who is youngest among six family members G, H, I, J, K and L? (Each member is of different ages.)
I. G is the daughter-in-law of J, K is grandson of L, who is the father of H.
II. G is not youngest while L is the eldest.
III. H is the father of I, who is grandson of L. J is the wife of K's son and I's father
(a) If the data in statement I and II are sufficient to answer the question, while the data in statement III are not sufficient to answer the question.
(b) If the data in statement I alone or in the statement II alone or in the statement III alone is sufficient to answer the question.
(c) If the data in statement I and III are sufficient to answer the question, while the data in statement II is not sufficient to answer the question.
(d) If the data in statement II and III are sufficient to answer the question, while the data in statement I is not sufficient to answer the question.
(e) If the data in all the statement I, II and III are necessary to answer the question

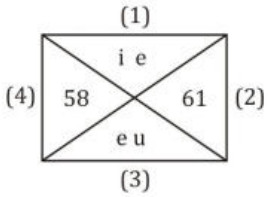
Directions (19-21): Study the following information and answer the questions given below:

There is four triangles given in question on which we apply some operation individually on each triangle and then convert it into solution. We have to answer the questions from the triangle which comes after the operation applied on the given triangle.
For example-



(1) For triangle 1- if the total letter between given two letters in the triangle 1 is less than three then change each letter to previous letter according to English alphabetical series
(2) For triangle 2- if the difference between given two digit is less than 5 then change the each digit to previous digit.
(3) For triangle 3- if the total letters between given two letters is more than 5 then change the each letter to previous letter according to English alphabetical series.
(4) For triangle 4- if the difference between given two digits is more than 2 then change each digits to previous digit.

Note: If the above condition are not applied then we write the digit and letter as it is in solution part.
Based on the above example solve the given question.



19. How many meaningful words are formed by letter combining from triangle 1 and triangle 3?
(a) None (b) Two (c) Three
(d) One (e) Four

20. What is the sum of each digits which is obtained in triangle 2 and triangle 4?
(a) 17 (b) 18 (c) 19
(d) 20 (e) 16

21. Which of the following letter is obtained in triangle 3?
(a) d,f (b) t,c (c) d,t
(d) d,v (e) t,b

Directions (22-24): A word and number arrangement machine when given an input line of words and numbers rearranges them following a particular rule in each step. The following is an illustration of input and rearrangement.

Input- acon 82 43 exam 16 acer loge 77 rope 22
Step I – care 82 acon 43 exam 16 loge 77 rope 22
Step II- cano 77 care 82 43 exam 16 loge rope 22
Step III- emax 43 cano 77 care 82 16 loge rope 22
Step IV- lego 22 emax 43 cano 77 care 82 16 rope
Step V- rpeo 16 lego 22 emax 43 cano 77 care 82
Input- 54 roll 39 back 87 25 cash seat 46 beat

22. In which of the following step 25 and seat are placed immediately?
(a) Step-III (b) Step-IV
(c) Step-III and Step-IV
(d) Step II (e) None of these

23. How many elements are there between 54 and 39 in step-II?
(a) One (b) Two (c) Three
(d) Four (e) None of these

24. Which elements are there between chsa and 54 in step-IV?
(a) 46, abck (b) eata,46 (c) 87,25
(d) rllo,seat (e) None of these

Direction (25-27): There are two rows given and to find out the resultant of a particular row we need to follow the following steps: -

Step 1: If an even number is followed by an odd (prime) number then the resultant will be the addition of both the numbers.
Step 2: If an odd number is followed by a perfect square then the resultant will be the difference of the square number and the odd number.
Step 3: If an odd number is followed by another odd number (but not a perfect square) then the resultant will be the addition of both the numbers.
Step 4: If an even number is followed by an odd (non-prime) number then the resultant will be the difference of the odd number and the even number.
Step 5: If an odd number is followed by an even number then the resultant comes by multiplying the numbers.

25. Find the sum of two rows
6 5 2
11 4 3
(a) 38 (b) 32 (c) 42
(d) 57 (e) None of the above

26. If the sum of the resultants of two rows is 44. Then find the value of X.
14 7 5
12 X 6
(a) 3 (b) 9 (c) 2
(d) 5 (e) None of the above

27. Find the difference between the resultant of first and second row.

7 4 8

11 9 13

(a) 2 (b) 3 (c) 8

(d) 9 (e) None of the above

Directions (28-30): Study the following information carefully and answer the questions given below.

There are five doctors of different types viz., Ophthalmologist, Orthopedic surgeon, Psychiatrist, General physician and Dentist in a hospital but not necessarily in same order. They attend their patients at different timing in a single day. The duration of their meeting with the patient is different. The total duration of the meeting with the patients by all doctors is of 11 hours. There is no gap between the meeting time of all doctors. The duration of meeting either full hour or half an hour but not in one third or one fourth.

The one who is orthopedic surgeon attends their patients from 12:30 to 3pm.The dentist attends their patients immediate before or immediate after the Orthopedic surgeon. The meeting hour of Dentist with the patients is three hours. The duration of meeting with patients of General physician is more than duration of meeting of Psychiatrist with patients by 1 hour. General physician attends meeting just after the meeting of Psychiatrist. The general Physician does not attend patients at the last. The Ophthalmologist attends their patients before the Orthopedic surgeon but not immediate before. The duration of meeting of Ophthalmologist is of 1.5 hours. The timing of Psychiatrist meeting is after 6:00 am.

28. Who among the following attends patients from 3:00-6:00 pm?

(a) Ophthalmologist (b) Psychiatrist

(c) General physician (d) Dentist

(e) Orthopedic surgeon

29. Who among the following attends patients just after the Ophthalmologist?

(a) General physician (b) Psychiatrist

(c) Orthopedic surgeon (d) Dentist

(e) None of these

30. What is the duration (in hours) of the Psychiatrist's meeting with the patients?

(a) 2.5 hour (b) 3 hour (c) 3.5 hour

(d) 1.5 hour (e) 2 hour

Directions (31-33): Study the following information carefully and answer the questions given below:

There are nine persons namely A, K, L, M, N, O, P, Q and R live on three different floors from one to three. Ground floor is number 1 and top floor is number third but not necessarily in the same order. There are three flats on each floor- flat-1, flat-2 and flat-3 from west to east such that flat-1 of third floor is exactly above flat-1 of second floor which is exactly above flat-1 of first floor and other flats are placed in the same way.

A lives in an even numbered flat. P lives just above M in a flat numbered 3. A does not live on the same floor on which P lives. O lives just above Q.Q does not live on the same floor on which M lives. N lives just below M in a flat numbered 3. L lives left to R.

31. Who lives in flat-3 of first floor?

(a) A (b) K (c) P

(d) N (e) None of these

32. Who among the following lives immediate left to P?

(a) R (b) L (c) O

(d) Q (e) None of these

33. How many persons live below M in flat 3 segment ?

(a) Two (b) No one

(c) One (d) either (a) or (c)

(e) None of these

Directions (34-37): In each of the questions below are given three statements followed by three conclusions number I, II and III. You have to take the given statements to be true even if they seem to be at variance from commonly known facts. Read the entire conclusion and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

34. **Statements:** All pigs are Zebra.
All Zebra are Rabbits.
No Ant are Pig.

Conclusions: **I.** Some rabbit is Ant.
II. Some Zebra are Ant is a possibility.
III. Some Ant are Pig.

(a) Only I follows (b) Only II follows

(c) Only III follows (d) All follow

(e) None of these

35. **Statements:** Some bat are pen.
Some pen are Shirt.
No shirt is Coat.

Conclusions: **I.** Some Coat is Pen.
II. Some Coat is shirt is a possibility.
III. All pen can be Coat

(a) None follows (b) only II follows

(c) only III follows (d) only I follows

(e) only either II or III follow

36. **Statements:** All Men are Rock.
Some men are pearl.
No Rock is Angel.

Conclusions: **I.** Some men are not Angel.
II. All Pearl can be Angel is a possibility.
III. Some Angel can be Pearl is a possibility.

(a) only I and II follow (b) only I and III follow

(c) only II and III follow (d) All I, II and III follow

(e) None of these

37. **Statements**: Some Z are X
Some X are not U
Some V are U

Conclusions: **I.** All U can be X
II. All V can never be Z

(a) Only I and II follow (b) Only II follows
(c) Only I follows (d) None follows
(e) None of these

Directions (38-40): Study the following information carefully and answer the questions that follow:

There are five cars – A, B, C, D, F – parked in a row facing north direction, but not necessarily in the same order. The distances between two adjacent bikes are successive multiples of three (i.e. if the distance between the 1st and the 2nd bike is 3 m, 1st and the 3rd bike is 6m and between 1st and 4th bike is 9 m and so on.)

(i.e. suppose Car A is left end of the line at point R then the remaining people will stand at a distance as follows - 3m, 6m, 9m……..from the end)

Car A is standing at the left end of the line. Two cars are standing between Car A and Car B. Car C stand second to the left of Car B. Car F is an immediate neighbor of Car C. Only one person stands between Car F and Car D. Car G which starts moving from point P which is 5m in north from Car F. Car G moves 12 m in north-east direction till point Q. Point Q and Car D are inline vertically. Car D moves 4m in the north direction and stops at point R. Car A moves in the direction to point R.

38. Car A at which of the following point after moving from its starting position?
(a) point R
(b) Point P
(c) Between point P and Car F
(d) Can't be determined
(e) Point D

39. What is the shortest distance between Car D's new position and Car F's position?
(a) $\sqrt{41}$m (b) $\sqrt{52}$m (c) 12m
(d) 21m (e) None of these

40. What is the distance between Car G's new position and Car D's old position?
(a) $\sqrt{41}$m (b) $\sqrt{21}$m (c)$6\sqrt{3} + 5$m
(d) $5\sqrt{3}$m (e) None of these

Directions (41-42): In each question below is given a statement followed by two assumptions numbered I and II. An assumption is something supposed or taken for granted. You have to consider the statement and the following assumption and decide which of the assumption is implicit in the statement.
Give answer
(a) If only assumption I is implicit
(b) If only assumption II is implicit
(c) If either I or II is implicit
(d) If neither I nor II is implicit
(e) If both I and II are implicit

41. **Statement**: Government should deploy army to rehabilitate the people displaced due to earthquake.
Assumptions
I. Army can be used for purposes other than war also.
II. Only army can rehabilitate the displaced victims of earthquake.

42. **Statement**: A Government advertisement in public interest- "For a child's better mental health, admit him/her to a school only after five years of age."
Assumptions
I. A child cannot learn before he/she turns five.
II. Some school authorities were admit children who are below five years of age.

Directions (43-44): In each question below, are given a statement followed by two courses of action numbered I and II. On the basis of the information given in the statement, you have to assume everything in the statement to be true, and then decide which of the suggested courses of action logically follow(s) for pursuing.
Give answer:
(a) if only I follows.
(b) if only II follows.
(c) if either I or II follows.
(d) if neither I nor II follows.
(e) if both I and II follow.

43. **Statement**: A number of school children in the local schools have fallen ill after the consumption of their subsidized tiffin provided by the school authority.
Course of action
I. The tiffin facility of all schools should be discontinued with immediate effect.
II. The government should implement a system to certify the quality of tiffin provided by the school.

44. **Statement**: A huge rally will be organized by the people in the locality, on a religious occasion and the police was informed accordingly.
Course of action
I. Adequate police force should be deployed to oversee the procession of the rally.
II. Vehicles on the road should be advised a diversion to avoid traffic congestion.

Directions (45-47): Study the following information carefully and answer the questions given below:

Eight persons namely J, K, L, M, N, O, P and Q are living in an eight-floor building with bottommost floor being the first floor while topmost floor being numbered as eighth floor. Only one person stays on one floor. All of them belong to the same family and there is only two married couple but they have different blood groups i.e. AB+, AB-, O-, B-, A-, A+, O+ and B+. Each of them participated and

obtained different grade in a competitive exam viz. A, B, C, D, E, F, G and H but not necessarily in the same order. The grading is done in alphabetical order on the basis of their marks with top scorer obtaining A grade while the lowest scorer being given H grade.

L's maternal aunt does not live on eighth or first floor. The person who is the third lowest scorer lives on the fifth floor. K is the wife of Q and she has only one child. The person who scored sixth highest marks does not have B- blood group. The person whose blood group is AB- lives on an even-number floor. The person whose blood group is O- is an unmarried brother of Q. O is the sister-in-law of Q. L's grandmother has only one brother. The person whose blood group is AB+ lives on the top floor. The third highest scorer lives between K and L's grandmother. O obtained B grade and M's husband's brother-in-law scored the highest marks. M is the mother of Q. The person who obtained G grade has O- blood group and does not stay on the fifth floor. The person whose blood group is A+ lives on the seventh floor. N is the father of J, who is the uncle of L. K's father-in-law obtained E grade and lives on the sixth floor. The person who obtained D grade has A- blood group and lives on the third floor. The person who scored the lowest marks lives on first floor. Q's child and the one whose blood group is B+ live on an even-numbered floor. L's grandmother obtained F grade and L's uncle is the second lowest scorer. L does not has AB- blood group.

45. Who amongst the following has AB- blood group?
(a) N (b) Q (c) J
(d) M (e) L

46. How is the person whose blood group is A- related to J?
(a)Brother-in-law (b) Brother
(c) Son (d) Sister-in-law
(e) Father

47. Who lives immediately above the one whose blood group is A-?
(a) Q
(b) O
(c) The one who scored the third highest marks
(d) The one who obtained F grade
(e) The one whose blood group is AB+.

48. Who amongst the following lives on an even numbered floor below the person whose blood group is O+?
(a) Q
(b) The one whose blood group is A-
(c) The one who obtained F grade
(d) The one who obtained C grade
(e) The one whose blood group is A+

49. **Statement:** A slump in home sales has pushed builders' inventory to "unsustainable levels" in the National Capital Region of Delhi, creating conditions for a real price correction that developers have so far avoided.
Which of the following statements is inferred on the basis of the given statement?
(a) Demand for houses is quite low in most of the big cities.
(b) The high inventory level will hamper the ability of launching new projects by the builders.
(c) Builders in the market who have shown a good track record of delivering on time and on their promises, have been able to garner sales even in this slow market.
(d) Unless this unsold stock gets absorbed, it will be difficult for consumer confidence to come back in this market.
(e) High prices have pushed most of the on-sale apartments beyond the reach of average home buyers.

50. **Statement:** Next time, when you lose your baggage or meet with an accident while travelling by train, you need not run from pillar to post and wait for years before the cheque lands at your door.
Which of the following can be inferred from the given information? (An inference is something that is not directly stated but can be inferred from the given information.)
(a) There will be quick settlement of claims into the customer's account.
(b) All travellers' details will be linked with Aadhaar card.
(c) The loss will be covered by any insurance company through railways.
(d) There will be direct settlement of claim by the IRCTC.
(e) None of these

QUANTITATIVE APTITUDE

Direction (51-55): Calculate the approximate value of given questions

51. (421.98 + 478.21) ÷ ? = 60.029
(a) 6 (b) 8 (c) 9
(d) 12 (e) 15

52. $\sqrt{257} \times 19.17 + 8.15 \times 13.78 = ?$
(a) 406 (b) 450 (c) 432
(d) 416 (e) 392

53. 6.217 × 23.88 + ? = 18.98 × 32.12
(a) 216 (b) 224 (c) 200
(d) 228 (e) 250

54. 27.897 × 16.21 = ? × 13.98 + 69.87
(a) 15 (b) 22 (c) 27
(d) 32 (e) 39

55. 272.112 + 189.98 + 84.101 = ? × 12.89 × 6.11
(a) 5 (b) 7 (c) 9
(d) 11 (e) 13

Directions (56-60): What will come in the place of the question mark (?) in the following number series?

56. 117.5, 117, 119, 111, 143, ?
(a) 9 (b) 12 (c) 15
(d) 18 (e) 21

57. 15, 12, 31, 148, ?
(a) 1039 (b) 1011 (c) 1012
(d) 1024 (e) 1027

58. 1, 13, 83, 419, 1679, ?
(a) 5029 (b) 5039 (c) 5019
(d) 5049 (e) 5059

59. 12, 25, 48, 99, 194, 393, ?
(a) 780 (b) 786 (c) 792
(d) 783 (e) 789

60. 3, 11, 31, 69, 131, ?
(a) 215 (b) 217 (c) 221
(d) 223 (e) 213

Directions (61-65): Table given below shows number of tickets sold in six different theatres, number of tickets sold to children and remaining ticket sold to adults [male and female]. Study the data carefully and answer the following questions.

Theatre	Ticket sold to children	Ticket sold to Adults (Male : Female)
C1	15	6 : 7
C2	10	3 : 4
C3	20	2 : 3
C4	14	6 : 5
C5	8	5 : 4
C6	12	9 : 8

Total 80 tickets are sold in each theatre.

61. Find the ratio of number of tickets sold to males by C3 and C6 theatre together to number of tickets sold to females by C3 and C5 theatre together.
(a) 14 : 19 (b) 15 : 17 (c) 20 : 23
(d) 16 : 19 (e) 14 : 17

62. Number of female who bought ticket from C2 and C4 theater together is what percent more than number of males who bought ticket from C5 theatre.
(a) $33\frac{1}{3}\%$ (b) 50% (c) $66\frac{2}{3}\%$
(d) 75% (e) 87.5%

63. If per ticket price for children, male and female is Rs. 150, Rs. 200 and Rs. 250 respectively. Then find the total revenue earn by C4 theater.
(a) 16600 (b) 15400 (c) 16800
(d) 15800 (e) 16400

64. Find the average number of male who bought tickets from C1, C2 and C3 theatre together.
(a) 30 (b) 28 (c) 32
(d) 34 (e) 36

65. Number of males who bought ticket from C4, C5 and C6 together is how much more than number of females who bought ticket from same theatres.
(a) 18 (b) 20 (c) 21
(d) 24 (e) 26

Directions (66-70): In each of these questions, two equations (i) and (ii) are given. You have to solve both the equations and give answer
(a) if x>y
(b) if x≥y
(c) if x<y
(d) if x ≤y
(e) if x = y or no relation can be established between x and y.

66. (i) $2x^2 - 5x + 3 = 0$ (ii) $3y^2 - 4y + 1 = 0$

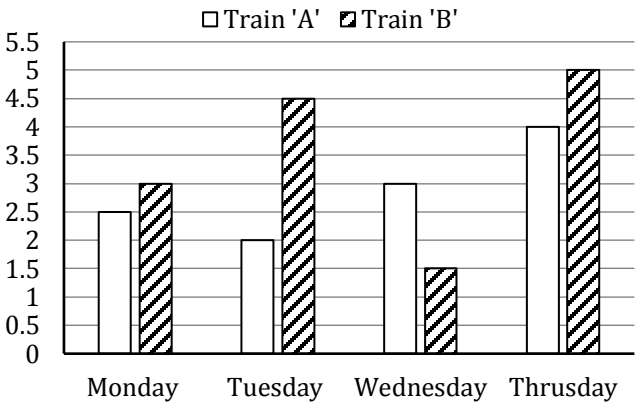
67. (i) $x^2 - 17x + 72 = 0$ (ii) $y^2 - 27y + 180 = 0$

68. (i) $(x - 12)^2 = 0$ (ii) $y^2 - 21y + 108 = 0$

69. (i) $2x^2 + 7x + 5 = 0$ (ii) $3y^2 + 12y + 9 = 0$

70. (i) $x^2 + 2x - 35 = 0$ (ii) $y^2 + 15y + 56 = 0$

Directions (71-75): Bar graph given below shows the time taken by two trains in hr, on different days. Study the data carefully and answer the following questions:



Both Train Cover 450km distance on every day

71. Speed of train 'A' on Tuesday is what percent more than speed of train 'B' on Monday?
(a) $33\frac{1}{3}\%$ (b) 50% (c) $66\frac{2}{3}\%$
(d) 75% (e) 87.5%

72. Find the average speed of train 'B' on Tuesday and Train 'A' on Wednesday?
(a) 140 (b) 130 (c) 135
(d) 120 (e) 150

73. On Friday, speed of train 'A' increases by 60% and speed of train 'B' increases by 25% as compared to Thursday. Find the sum of the time taken by both trains separately to cover the same distance?
(a) 6.5 hr (b) 7.5 hr (c) 6 hr
(d) 7 hr (e) 8 hr

74. Speed of train 'A' on Tuesday is how much less than speed of train 'B' on Wednesday?
(a) 50 km/hr (b) 60 km/hr (c) 75 km/hr
(d) 85 km/hr (e) 100 km/hr

75. Find in how much time train 'A' can cover the given distance if speed of train 'A' increases by 60% on tuesday?
(a) 3 hr (b) 2.5 hr (c) 1.5 hr
(d) 1.25 hr (e) 1.75 hr

Directions (76-80): The following questions are accompanied by two statements (A) and (B). You have to determine which statement(s) is/are sufficient /necessary to answer the questions
(a) if the Statement 'A' alone is sufficient to answer the question but the Statement 'B' alone is not sufficient
(b) if the Statement 'B' alone is sufficient to answer the question but the Statement 'A' alone is not sufficient
(c) if both Statement 'A' and 'B' together are needed to answer the question
(d) if either the Statement 'A' alone or Statement 'B' alone is sufficient to answer the question
(e) if you cannot get the answer from both the Statements together

76. Is 'Z' a positive integer?
(A) $Z^7 > Z$ (B) $Z^8 > Z$

77. Find the value of $4^{\frac{1}{a}} + 4^{\frac{1}{b}}$?
(A) Sum of inverse of a and b is equals to $\frac{6}{5}$
(B) Multiplication 'a' and 'b' is equals to 5

78. In how many days 14 men can complete a piece of work?
(A) If 18 women can complete the same piece of work in 24 days.
(B) If 28 children can complete the same piece of work in 56 days.

79. When one ball is drawn at random from an urn containing 25 balls, what is the chance that it is red?
(A) The urn contains 10 yellow and 8 green balls.
(B) The urn contains all colored balls.

80. Is 'w' an integer?
(A) 3w is an odd number.
(B) 2w is an even number.

Directions (81-85): Data regarding number of boys & girls in both the colleges is as follows: -
Average no. of Girls in St. Xavier college and Vijaya College is 210 & total number of boys in both the college is 810. Number of Girls is 2/3 of boys & number of Girls is 2/5 of number of Boys in St. Xavier college and in Vijaya College respectively.

81. Number of girls in Vijay college is what percent of the number of girls in St. Xavier College.
(a) 50% (b) 62.5% (c) 75%
(d) $66\frac{2}{3}\%$ (e) 87.5%

82. Average number of girls in St. Xavier college and 'X' college is 320. If total number of students in 'X' college is 25% more than total number of students in St. Xavier college then find the number of boys in 'X' college.
(a) 450 (b) 400 (c) 375
(d) 350 (e) 300

83. Find the difference between the total number of students in Vijaya college to the total number of students in St. Xavier college.
(a) 15 (b) 20 (c) 25
(d) 30 (e) 35

84. Ratio between number of boys in Vijaya college to number of boys in 'Y' college is 9 : 13 and number of girls in 'Y' college is 20% less than that in Vijaya college. Find the total number of students in 'Y' college?
(a) 784 (b) 794 (c) 789
(d) 798 (e) 778

85. Number of boys in Vijaya college is what percent more than number of boys in St. Xavier college?
(a) 32.5% (b) 20% (c) 50%
(d) 37.5% (e) 25%

86. 15 men can do a piece of work in 'X' days. 21 women can do a piece of work in 'X – 4' days. 35 men can do a piece of work in 'Y' days and 63 women can do a piece of work in 'Y – 4' days. Find the value of 'X' ?
(a) 14 (b) 18 (c) 28
(d) 24 (e) 32

87. Cost price of article A is double then that of article B and shopkeeper mark up both the article 20% more than the cost price. If at the time of sale shopkeeper gave Rs. 9 discount and earn 17% profit on total. Find the cost price of article A?
(a) 100 (b) 200 (c) 150
(d) 250 (e) 50

88. A committee of 5 people is to be formed among 4 girls and 5 boys. What is the probability that the committee will have less number of boys than girls?
(a) 3/14 (b) 7/13 (c) 3/5
(d) 5/14 (e) None of these

89. A train running at 25 km/hr takes 18 seconds to pass a platform and it takes 12 seconds to pass a men walking at 5 km/hr in the opposite direction. Length of train in how much more than length of the platform (in m)
(a) 50 (b) 75 (c) 100
(d) 125 (e) 150

90. Satish and Bhavya entered into a partnership with Rs 15000 and Rs 18000 respectively. Abhishek joined them after 'x' months and contributes Rs 24000 and Bhavya left 'x' month before the end of year. If they share profit at the end of the year. If they share profit in the ratio 10 : 9 : 12. Find the value of 'x'.
(a) 4 month (b) 6 month (c) 9 month
(d) 3 month (e) 8 month

91. Sakshi married 6 years ago. Today her age is 5/4 times her age at the time of her marriage and her son is 1/5 of her age. Find the ratio of Sakshi age to her son's age after 10 years ?
(a) 3 : 1 (b) 5 : 2 (c) 5 : 3
(d) 3 : 2 (e) 4 : 1

92. Ravi invested Rs 18000 in scheme 'A' which offers 15% p.a. at simple interest and Rs 15000 in scheme 'B' which offers 18% p.a at compound interest. Find the difference between the interest earn from these two schemes after two years?
(a) 468 (b) 396 (c) 456
(d) 486 (e) 482

93. An alloy of copper and aluminum has 40% copper. Another alloy of Copper and Zinc has Copper and Zinc in the ratio 2: 7. These two alloys are mixed in ratio 5:3. Quantity of aluminum is what percent more/less than the quantity of copper in final alloy.
(a) $11\frac{1}{9}\%$ (b) $11\frac{1}{3}\%$ (c) 12%
(d) 13% (e) 12.5%

94. Two boats, travelling at 5 Km/h and 10 Km/h respectively, head directly towards each other. They are now at a distance of 20 km from each other. How far apart are they (in Kms) one minute before they collide?
(a) $\frac{1}{12}$ (b) $\frac{1}{6}$ (c) $\frac{1}{4}$
(d) $\frac{1}{3}$ (e) None of these

95. If the volume and curved surface area of a cylinder 616 m^3 and 352m^2 respectively, what is the total surface area of the cylinder (in m^2)?
(a) 429 (b) 419 (c) 435
(d) 421 (e) 417

96. In an alloy, zinc and copper are in the ratio 1 : 2. In the second alloy the same elements are in the ratio 2 : 3. In what ratio should these two alloys be mixed to form a new alloy in which the two elements are in ratio 5 : 8?
(a) 7 : 11 (b) 3:10 (c) 5 : 11
(d) 9:11 (e) None of these

97. 40 men, working 8 hours a day can do a piece of work in 15 days. Find the number of days in which second group of 60 men working 4 hrs a day can do twice the work. Assume that 3 men of the first group do as much work in 2 hour as 4 men of the second group do in 3 hrs.
(a) 60 days (b) 40 days (c) 80 days
(d) 70 days (e) 75 days

98. A boat travel 75 km downstream and take same time as it travels 60 km in upstream. Speed of boat in downstream is what percent of the speed of boat in still water.
(a) $111\frac{1}{9}\%$ (b) $112\frac{1}{2}\%$ (c) 113%
(d) 140% (e) 110%

99. A train crosses a pole in 24 sec. A second train of same length crosses a platform in 30 sec with a speed 20% more than the first train. Find out the ratio of length of train and length of platform.
(a) 2 : 1 (b) 3 : 1 (c) 2 : 3
(d) 3 : 2 (e) 1 : 2

100. A tank can be filled with water by two pipes A and B together in 36 minutes. If the pipe B was closed after 30 minutes, the tank is filled in 40 minutes. The pipe B can alone fill the tank in?
(a) 45 minutes (b) 60 minutes (c) 75 minutes
(d) 90 minutes (e) 85 minutes

ENGLISH LANGUAGE

Directions (101-106): Read the following passage carefully and answer the questions given below it. Certain words are given in bold to help you locate them while answering some of the questions.

A lot of the media discussion on the global economy nowadays is based on the notion of the "new normal" or "new mediocre"—the phenomenon of slowing, stagnating or negative economic growth across most of the world. News in terms of employment generation is even worse, with hardly any creation of good quality jobs and growing material insecurity for the bulk of the people. All sorts of explanations are being **proffered** for this state of affairs, from technological progress, to slower population growth, to insufficient investment because of shifts in relative prices of capital and labour, to "balance sheet recessions" created by the private debt overhang in many economies, to contractionary fiscal stances of governments that are also excessively indebted.

Yet, these arguments that treat economic processes as the inevitable results of some forces outside the system that follow their own logic and are beyond social intervention are hugely misplaced. Most of all, they let economic policies off the hook, and this is massively important because the possibility of alternative strategies that would not result in the same outcomes are simply not considered.

In an important new book (Failed: What the "Experts" Got Wrong About the Global Economy, Oxford University Press, New York, 2015), Mark Weisbrot calls this bluff effectively and comprehensively. He points out: "Behind almost every prolonged economic malfeasance there is some combination of outworn bad ideas, incompetence and the malign influence of powerful special interests". Unfortunately, such nightmares are prolonged and even repeated in other places because even if the lessons from one catastrophe are learned, they are typically not learned, or at least not taken to heart, by "the people who call the shots".

The costs of this failure are huge for the citizenry: for workers who face joblessness or fragile, insecure employment at low wages; for families whose access to essential goods and social services is reduced; for farmers and other small producers who find that their activities are simply not financially viable; for those thrown into poverty because of crisis and instability or those facing greater hunger; and for almost everyone in society when their lives become more insecure in various ways. Many millions of lives across the world have been ruined because of the active implementation of completely wrong and unnecessary economic policies. Yet, because the blame is not apportioned where it is due, those who are **culpable** for this not only get away with it but are able to continue to impose their power and expertise on economic policies and on governing institutions. For them, there is no price to be paid for failure.

Weisbrot illustrates this with the telling example of the still unfolding economic tragedy in the eurozone. He describes the design flaws in the monetary union that meant that the European Central Bank (ECB) did not behave like a real central bank to all the member-countries because when the crisis broke in 2009-10 it did not behave as a lender of last resort to the countries in the European periphery that faced payment difficulties. Instead, the most **draconian** austerity measures were imposed on these countries, which simply drove them further into economic decline and made their debt burdens even more burdensome and unpayable.

It took two years for ECB Governor Mario Draghi to promise to "do whatever it takes to save the euro", and he did this when the crisis threatened to engulf the entire European Union and force the monetary union to collapse. When the financial bleeding was stemmed, it became glaringly evident that the European authorities, and the ECB, could have intervened much earlier to reduce the damage in the eurozone periphery through monetary and fiscal policies. In countries with their own central banks, such as the United States and the United Kingdom, such policies were indeed undertaken, which is why the recovery also came sooner and with less pain than still persists in parts of Europe.

Weisbrot notes that this entire episode should have provided "a historic lesson about the importance of national and democratic control over macroeconomic policy—or at the very least, not ceding such power to the wrong people and institutions". Unfortunately, the opposite seems to be the case, with the media and others drawing lessons that were very much in terms of blaming the victim. Indeed, Weisbrot makes an even stronger point when he says that this crisis was used by vested interests (including those in the International Monetary Fund, or IMF) to force governments in these countries to implement economic and social reforms that would otherwise be unacceptable to their electorates.

101. According to the passage, which among the following is the appropriate **theme** of the passage?

(a) Effects of imperfect planning of monetary policy by European central bank.

(b) Wrong decisions in economic and social policies leading to financial weakening of European countries.

(c) Declining Economic growth and increasing debt burdens.
(d) Consequences of the implementation of wrong and unnecessary economic policies.
(e) Importance of national and democratic control over macroeconomic policy.

102. What does the author mean by the phrase "**they let economic policies off the hook**"?
(I) There are certain economic establishments that feel that their economic strategies are not under any trouble as these economic slowdown and their subsequent results are beyond their control.
(II) The countries which feel that their economic policies have got nothing to do with their poor economic progress, blame certain inevitable forces outside the system for their economic conundrum.
(III) Those economic forces which feel that their policies and strategies are not the relevant reasons for their negative economic growth alsonegate the possibilities of any economic intervention as a preventive measure.
(a) Only (I) is true
(b) Only (II) is true
(c) Both (I) and (II) are true
(d) Both (II) and (III) are true
(e) All are true

103. According to the passage, how the implementation of imperfect economic policy affected the eurozone?
(a) Decrease in good quality job.
(b) The debt burden turned unpayable.
(c) Their central bank failed to dispense any financial help to Eurozone countries.
(d) Instability in technological and business investments.
(e) All of the above

104. According to the passage, what is/ are the cause(s) of the economic misdeeds?
(a) The inability of fabricating an efficient policy that would not affect the material instability of people.
(b) The pressure of improving the economic growth.
(c) The obsolete plans for fabricating the economic policy.
(d) Both (a) and (c) are correct.
(e) All of the above.

105. What suggestion has been mentioned by Weisbrot for emerging from economic crises?
(a) Effectively executing the social and economic policies in time by authorities.
(b) Implementing the economic policies rightly in all the states of the country.
(c) The central bank must act as lender of last resort to all the countries.
(d) There must be some compensation measures for the failure.
(e) All of the above

Directions (106): Choose the word/group of words which is most similar in meaning to the word/group of words printed in bold as used in passage.

106. Draconian
(a) innate (b) inhibit (c) stringent
(d) demure (e) vex

Direction (107-112): Read the following passage carefully and answer the questions given below it. Certain words are given in bold to help you locate them while answering some of the questions.
The US government's decision to grant India the licence for the export of 22 Guardian drones through the US foreign military sales programme will address gaps in India's maritime surveillance capabilities. However, India's quest for armed drones in the absence of a defined strategy for the use of unmanned aerial vehicles (UAVs) has created misconceptions about their utility for India in conducting cross-border strikes or "surgical strikes" against Pakistan-based terrorists.

The Guardian drones, manufactured by General Atomics, will complement India's maritime surveillance aircraft at sea in intelligence, surveillance and reconnaissance, helping boost battlespace awareness and target acquisition or guide forces on suspected surface threats. The additional capability will free up the navy's Boeing P-81s for anti-submarine warfare (ASW). This will be critical given the increasing forays of Chinese submarines in the India Ocean region and India's capacity-deficit in ASW.

India's pursuit of armed drones has led it to order 10 Heron TP drones from Israel and this will likely be the highlight of Indo-Israeli defence cooperation against the backdrop of Prime Minister Narendra Modi's visit to Israel. The armed drones were purchased in 2015 for a reported $400 million. These will be India's first armed drones, significantly expanding the aerial offensive capabilities of the Indian Air Force (IAF).

The Israel Aerospace Industries' (IAI's) Heron TPs have an endurance of upwards of 30 hours, maximum take-off weight of 5,300kg and a potential weapons/mission payload of up to 1,000kg. They can be used for both surveillance as well as combat and support roles, and can carry air-to-ground missiles to take out hostile targets. The IAF currently operates a fleet of IAI-made Harpy self-destructing anti-radar drones and IAI searcher UAVs and indigenously built Nishant drones for surveillance and intelligence-gathering.

The use of UAVs permits Indian policymakers to exercise the use of force while substantially lowering the risk to military personnel and acts as a force multiplier in enhancing surveillance capabilities. This expands the variety of missions the Indian Armed Forces can conduct.

The use of unmanned systems such as drones removes potential political costs and makes it easier for policymakers to opt for "clean and quick" use of military force rather than the slow and often difficult political and diplomatic options. In India's case, the Indian military hopes that armed UAVs will give it the capability to conduct symbolic retaliatory attacks against Pakistan-based terrorists while limiting the violation of Pakistani sovereignty and hopefully avoiding any escalatory spiral.
The ideas being promulgated within the Indian military and strategic community on the successful use of armed drones for "surgical strikes",etc., is contingent on operating in a non-existent air defence environment. Put simply, if manned combat aircraft can't get to the target, neither can armed drones. The idea that New Delhi could push armed drones in a Pakistani air defence environment to conduct surgical strikes against terrorists is **ludicrous**. Reality is more constrained and requires a nuanced understanding of the operating environment.

Modern air defences are more dangerous and effective than ever before. Case in point, the US military has rarely used drones in defended or contested air spaces. Armed drones against targets in Afghanistan or Yemen have succeeded as these have undefended air spaces or in Syria and Pakistan because air defences have not been employed to target them.

To mitigate the threat to manned and unmanned aircraft from air defences, India needs long-range stand-off weapons systems along with the requisite advances in intelligence, reconnaissance and surveillance. The under-development air-launched Brahmos for the Sukhoi-30 MKI or the 300km SCALP air-to-ground cruise missiles being acquired for the yet-to-be-inducted Dassault Rafale give India more credible retaliatory options in Pakistan-occupied Kashmir vis-à-vis vulnerable and expensive armed UAVs.

This is not to say that armed UAVs will have no role in transforming the way India fights wars in the future with technological advances in automation, miniaturization, stealth, and other fields. But such capabilities, if they are to be operationalized affordably in India, require the adoption of evolved **doctrines** and specific operating concepts that enable in-tandem operations involving manned and unmanned assets. The adoption of unmanned assets for adjunct missions also potentially allows for the more efficient use of limited manned platforms.

While reports indicate the existence of a "project Ghatak", managed by the Aeronautical Development Agency and the Defence Research and Development Organization, for a stealth unmanned combat aerial vehicle (UCAV), there is little indication so far from the IAF regarding the strategic/tactical employment of UCAVs. The IAF's "Air Power Doctrine", last published in 2012, failed to once mention "unmanned" or "drone". The IAF's "Indigenization Roadmap 2016-2025" barely mentions UAVs apart from the fact that the IAF needs to possess highly autonomous strike capabilities against the full spectrum of potential targets.
Given India's complex security challenges, UAVs have the potential to play a role in enabling the Indian military not only in fighting wars but also in intelligence, reconnaissance and surveillance, and deterring cross-border terrorist attacks. Currently, however, the integration of unmanned assets, especially armed drones, with manned fighters and combined arms concepts remains at a **nascent** stage.

107. According to the passage, what are the advantages for India of having the UAV imported from USA?
(I) It will complement India's maritime surveillance aircraft at sea in intelligence, surveillance and reconnaissance.
(II) It will prevent the cross-border terrorist attacks.
(III) It will remove the potential political costs.
(IV) It will release the navy's Boeing P-81s for anti-submarine warfare (ASW).
(a) Only (I) is true
(b) Both (I) and (III) are true
(c) (I), (III) and (IV) are true
(d) (II), (III) and (IV) are true
(e) All are correct

108. Which of the following is/are the features of The Israel Aerospace Industries' (IAI's) Heron TPs?
(a) It can be used for surveillance and intelligence-gathering.
(b) It has maximum take-off weight of 5,300kg and a potential weapons/mission payload of up to 1,000kg.
(c) It can carry air-to-ground missiles to take out hostile targets.
(d) Both (b) and (c) are correct
(e) All are correct

109. What does the author mean the phrase "**Modern air defences are more dangerous and effective than ever before**"?
(I) It is very difficult to carry out operations either with manned combat aircraft or armed drones in those countries which have got better air defences.

(II) US military have effectively used their armed drones in countries like Afghanistan or Syria which have defenseless air spaces whereas they have hardly succeeded in countries where air defence is tight.
(III) Countries are now more advanced in tackling any kind of possible attacks even if it is through armed drones as they have secured their air better than ever before.
(a) Only (I) is correct
(b) Only (II) is correct
(c) Both (I) and (III) are correct
(d) Both (II) and (III) are correct
(e) All are correct

110. Which of the following sentences go(es) with the theme of the passage?
(I) Unmanned aerial vehicles have a major role to play for economy and security purposes.
(II) India requires impasse weapon system to reduce the threat to manned and unmanned aircraft from air defences.
(III) India has imported the armed drones from Israel and USA for security purposes.
(a) Only (I) is correct
(b) Only (II) is correct
(c) Both (I) and (III) are correct
(d) Both (II) and (III) are correct
(e) All are correct

111. Which of the following is the most appropriate **title** for the passage?
(a) The IAF's "Indigenization Roadmap 2016-2025"
(b) The "clean and quick" use of military force.
(c) Cross-border strikes or "surgical strikes" against Pakistan
(d) India's quest for Armed drones
(e) India's capacity-deficit in ASW(anti-submarine warfare).

Direction (112): Choose the word/group of words which is most similar in meaning to the word/group of words printed in bold as used in passage.

112. Ludicrous
(a) veracity (b) preposterous (c) winsome
(d) vociferous (e) detract

Directions (113-117): In each of the following paragraph, there are two blank spaces. Below each paragraph, there are five options and each option consists of two words which can be filled up in the provided blanks respectively to make the paragraph grammatically and coherently correct. Find the most appropriate set of words that fit into the blanks contextually.

113. Air pollution in Delhi is being recognised as one of the biggest public policy challenges India has faced in recent times. Everybody agrees that there is need for _____ action and immediate intervention. However, we see few signs of such an intervention on the ground. The primary reason for our inability to respond swiftly and in a coordinated manner is the multiplicity of actors involved and the lack of _____ on roles.
(a) crucial, obscurity (b) instant, importance
(c) drastic, clarity (d) extreme, ambiguity
(e) harsh, equivoque

114. The Russian cyberattack has been _____ as the "most destructive and costly in history". It is hard not to wonder whether the Kremlin has outlived its utility in relation to the White House. If not a faint echo of the Cold War, the climate is frosty again. This is the quirky _____ to geopolitics.
(a) destined, commencement
(b) accused, abrogation
(c) compelled, reversal
(d) condemned, facet
(e) detested, denouement

115. History, that had been declared ended, appears to have started all over again for the U.S. on November 8, 2016 when Mr. Trump won the presidency. The _____ punditry in America that missed the revolt around them initially blamed Mr. Trump's victory on the lack of education, racism and misogyny of his supporters. But the revival of the cult of liberal capitalism appeared _____; it needed visions of a demon at the door.
(a) mainstream, elusive
(b) exceptional, enticing
(c) heterodox, subtle
(d) cynosure, fugitive
(e) conventional, encountering

116. According to another study _____ in the journal Psychological Science, women in countries with the highest degree of gender inequality pursue STEM careers in science and technology because they want the "clearest possible" path to financial success. This clear path often means _____ a science- or math-based profession.
(a) suppressed, ensuing (b) published, pursuing
(c) advertised, preceding (d) proclaimed, covering
(e) announced, exploring

117. The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 or FRA was a _____ legislation that sought to restore the rights of forest dwellers over land, community forest resources and habitats, and the governance and management of forests. Prior to that, most forest dwellers in the country were denied rights to their _____ forestlands since colonial times.
(a) landmark, traditional
(b) turning, prescribed
(c) vestige, rare
(d) compendium, weaving
(e) featured, divergent

Directions (118-120): Given below are five sentences among them three sentences are coherently placed in the precise sequence of the paragraph. Rearrange the jumbled sentences to make the paragraph contextually correct and answer the questions that follow.

(A) Nectome promises to preserve the brains of terminally ill people in order to turn them into computer simulations—at some point in the future when such a thing is possible.
(B) It's a startup that's easy to mock. Just beyond the mockery, however, lies an important reminder to remain skeptical of modern artificial intelligence technology.
(C) Nectome's biggest problem, however, isn't primarily ethical.
(D) That macabre proposition has resulted in lots of publicity for Nectome, which predictably got lumped together with earlier efforts to deep-freeze millionaires' bodies so they could be revived when technology allows it.
(E) The idea behind Nectome is known to mind uploading enthusiasts (yes, there's an entire culture around the idea, with a number of wealthy foundations backing the research) as "destructive uploading": A brain must be killed to map it.

118. The paragraph consists of five statements among which three of them are in their appropriate positions. Identify the pair that needs to be rearranged (or, exchanged) to make the paragraph contextually correct?
(a) A-E (b) C-E (c) B-D
(d) A-C (e) C-D

119. Which among the following sentences should consecutively follow statement (A) **"Nectome promises to preserve the brains of terminally ill people in order to turn them into computer simulations—at some point in the future when such a thing is possible"** after the rearrangement?
(a) A (b) C (c) B
(d) D (e) E

120. Which among the following sentences should contextually follow the last sentence of the paragraph after the rearrangement?
(a) The company has developed a way to embalm the brain in a way that keeps all its synapses visible with an electronic microscope.
(b) It's not particularly smart, and its memories aren't complex, but it's not "uploadable" yet.
(c) I'd argue that a truly intelligent artificial entity—intelligent like a person, with all the versatility it implies—would need to run a relatively faithful reconstruction of the brain.
(d) Different kinds of intelligence than ours are possible, and they can be better than humans at some tasks, like playing chess or even safely driving a vehicle.
(e) So far, even the most extreme optimists of mind uploading see it only in the distant future.

Directions (121-125): In the question given below four sentences are given which are grammatically correct and meaningful. Connect them by the word given above the statements in the best possible way without changing the intended meaning. Choose the best possible combination as your answer accordingly from the options to form a correct, coherent sentence.

121. ALTHOUGH
(A) The declines in the four top-tier cities contrast with a steady rise in prices in China's vast spread of smaller cities.
(B) Price growth in tier-3 cities in general was unchanged from January, the NBS said, without giving details.
(C) The majority of the 70 cities surveyed by the NBS still reported monthly price increases for new homes.
(D) The number of cities reported for increasing monthly prices for new homes has been dropped from January's 52 to Forty-four cities in February.
(a) only A-B (b) only B-C
(c) only C-D (d) Both A-B and C-D
(e) None of these

122. PROVIDED
(A) Human Rights Watch said it has documented numerous allegations of torture and ill-treatment in Saudi prisons and detention centres in recent years.
(B) Financial measures now lead to action to seize the assets in Russia of those who have committed human rights abuses or other serious crimes.

(C) Those who have violated human rights or caused other serious crimes in Russia, they will have an impact.
(D) Non-governmental organizations to declare detailed financial information are likely to have a chilling effect on civil society, two leading international rights bodies.
(a) only A-B (b) only B-C
(c) only C-D (d) Both A-B and C-D
(e) None of these

123. ALONG WITH
(A) Army Chief General Bipin Rawat today lauded China's military prowess, and appreciated its intend on military modernisation.
(B) Last week, China unveiled its largest defence spending increase in three years, setting an 8.1 per cent growth target this year, fuelling an ambitious military modernisation programme and making its neighbours nervous.
(C) While China ensured that their economy must rise, they did not forget the rise of their military power.
(D) General Bipin Rawat praised the neighbouring country China for its focus on economic rise.
(a) only A-D (b) only B-C
(c) only A-B (d) Both A-B and C-D
(e) None of these

124. SO THAT
(A) You can give your equity fund investments more time to grow in the market.
(B) You can increase your large-cap exposure by adding to your SBI Bluechip fund.
(C) When you need money in 3 years, use your debt funds as your first choice for withdrawals.
(D) The fact is both your investment time-frames are relatively short-term in nature.
(a) only A-D (b) only C-A
(c) only D-C (d) Both D-A and D-B
(e) None of these

125. UNLESS
(A) The gap in alertness and execution between green and white over the past two months has been almost painful to behold.
(B) England should absorb the harsh lessons of their worst finish in 31 years so as to telecast an improved performance in Japan.
(C) Never before in the professional era have they had a leaner campaign; not even at their lowest ebb at the 2015 World Cup did they look so collectively wooden.
(D) The chances of England prospering in Japan are on a par with Eddie Jones holidaying in Wales in the near future.
(a) only A-D (b) only C-A
(c) only B-D (d) Both D-A and B-D
(e) None of these

Directions (126-130): In the following questions, a phrase/idiom is given in bold whose meaning can be inferred from one of the highlighted words/phrases of four sentences given below each phrase. Choose the most appropriate meaning of the phrase among the four options that can also be replaced by the given phrase without altering the meaning of the sentence. If none of the sentences conveys the correct meaning, choose (e) i.e., "None of the above" as your answer.

126. Eager Beaver
(a) Don't worry about all the extra work, June is such an **enthusiast** that she usually does everyone's work.
(b) They sat in an **apathetic** circle, waiting for Old Jerry to come.
(c) Who can tell what are the limits which the Master of worlds has set to **mundane** calamity?
(d) He was always an **optimist**, and he always made everyone feel that everything was all right.
(e) None of the above

127. Bolster up
(a) It is almost impossible to **conjecture** what will be the basis of the settlement.
(b) We **gather** this simply from the opinions we had previously formed of the authors.
(c) We need to **reinforce** that painting with another nail before it falls off the wall.
(d) The price he would have given for a talk with Ann would not have been easy to **compute**.
(e) None of the above

128. Embark on
(a) She could not understand how Kingozi managed to **survive** ten hours day after day.
(b) I want to go back to school for a business degree, and I plan to **initiate** that process this fall.
(c) Our eyes are shut to the damning facts which **confront** us on every side.
(d) Spirits differ; some **yield** to the power of wisdom, while others are too strong.
(e) None of the above

129. Fallout
(a) If I had known what the **repercussion** would be, I would not have told them about my new business venture.
(b) It was rather a frightful place to go into in search of the **source** of a shriek.
(c) It seemed as if God intended to **bereave** us of her, for he brought her even to death's door.
(d) I have no interest distinct from that which has a tendency to **meliorate** the situation of mankind.
(e) None of the above

130. Go over
(a) During the processing a thick liquid should **exude**, covering the pimientos.
(b) No one has seen him **shed** a tear, of heard him utter a complaint.
(c) The purpose of the pear-shaped apertures was to enable the salt fumes to **percolate** freely around the vessels being fired.
(d) It was for them to **consider** how far they were justified in complying with his request.
(e) None of the above

Directions (131-135): In the question given below, a sentence is divided into five parts, out of which certain parts are highlighted which may or may not be grammatically correct. Choose the grammatically correct part out of the highlighted parts of the sentence as your answer. If all the highlighted parts are grammatically correct but the parts which are not highlighted contain some grammatical errors, choose the option stating, "None of these" as your choice. If all the given parts of the sentence are grammatically correct and provide the contextual meaning to the sentence, choose option (e) i.e. "No error" as your answer.

131. At the core of the potential confrontation (A)/and the projected nuclear proliferation (B)/**is the intra-religion factors**, (C)/**that has been to one major reason for** (D)/the surge of the ISIS, a Sunni outfit. (E)
(a) A (b) C (c) D
(d) None of these (e) No error

132. The Slow Movement about (A)/**slowing down to savor** (B)/what we eat, how we travel, (C)/**how we consume, how we produce and**, (D)/**most importantly, how we live**. (E)
(a) B (b) D (c) E
(d) None of these (e) No error

133. Many of us has become (A)/**so obsessed with losing time** (B)/that we desperately try (C)/**to save every last scrap off it** (D)/**in order to get our things accomplished**. (E)
(a) A (b) B (c) D
(d) E (e) No error

134. It is no disrespect to the departed (A)/to suggest that there was not another man (B)/**in the world last Wednesday whose death** (C)/**could have saddened so many hearts** (D)/in so many lands as Stephen Hawking. (E)
(a) A (b) C (c) D
(d) None of these (e) No error

135. The Parsis have become an integral part (A)/**of Indian society after 12 centuries in the country** (B)/**and the Tibetans may well followed suit unless** (C)/**China collapses under its own authority weight and** (D)/**the escapees can return to its motherland**. (E)
(a) B (b) C (c) D
(d) E (e) No error

Directions (136-140): Following questions have words given in bold each having five alternatives. Choose the word among the given options which has either most similar or most opposite meaning to the bold word.

136. STRIVE
(a) egregious (b) Covet (c) clandestine
(d) salubrious (e) atypical

137. BEMUSED
(a) meticulous (b) surfeit (c) pervasive
(d) engrossed (e) Fuddled

138. BEGUILE
(a) subversive (b) voracious (c) vicious
(d) phlegmatic (e) inveigle

139. EMBARGO
(a) prohibition (b) philistine (c) oasis
(d) ostentatious (e) aberrant

140. EXCULPATE
(a) Ameliorate (b) Condemn (c) Coagulate
(d) Torpor (e) Satiate

Solutions

REASONING ABILITY

Directions (1-3):
A Y E L P R S

1. (a); 2. (a); 3. (b);

Directions (4-6):
7 A 6 P & R $ 4 Y Q % T @ 3 9 S I O 9 9 J L E U * K # 3

STEP I: 7 A 6 P & $ 4 Y Q % @ 3 9 S I O 9 9 J L E U * # 3 K R T
STEP II: 7 A 6 P & $ 4 Y Q % @ 3 9 S I O 9 9 J L E U * # 3 K R T
STEP III: A 7 P 6 & $ Y 4 Q % @ 3 S 9 I O 9 J 9 L E U * # K 3 R T

4. (b); 5. (b); 6. (a);

Directions (7-9):

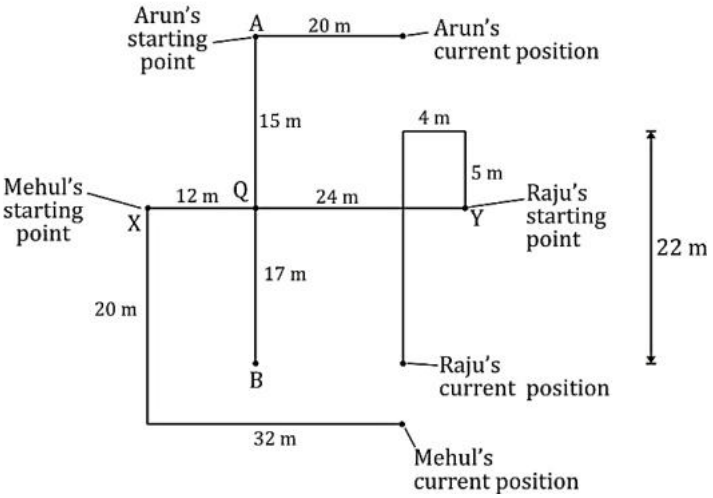
Boxes	Colours
P	-----
-----	-----
S	Purple
-----	-----
R	-----
V	Blue
-----	Orange
-----	----
-----	----
U	----
-----	Green

7. (b); 8. (c); 9. (d);

10. (e); There are Five meaningful words- Fair, Bowl, **Blow, Cone, Once, etc**

11. (b);

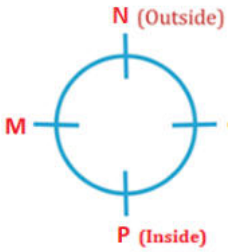
12. (c);



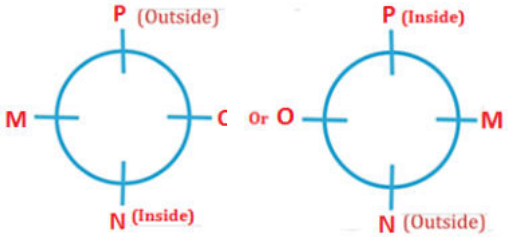
13. (c); 14. (c); 15. (a);

16. (c);

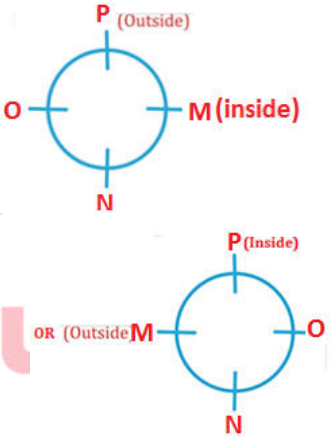
I.



II.



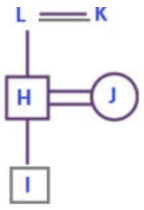
III.



I, II or III statement alone are sufficient to conclude that M, N, O and P are all not facing to centre of table.

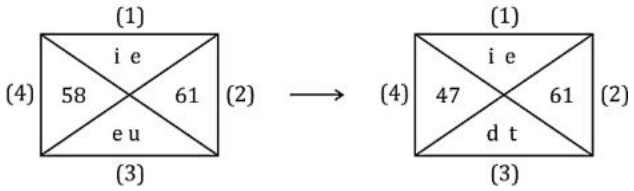
17. (c); From II and III-
6. A
5. E
4. C
3. D
2. B
1. F
It is clear that F is living on the Ground floor

18. (d);



From statements II and III, I is the youngest because G is not youngest.

Directions (19-21):



19. (e); Diet, edit, tide, tied.

20. (b);

21. (c);

Directions (22-24):

In this new pattern input output question only one word and one number is arranged in each step.

Let us understand the logic behind it- In each step the words and numbers are arranged from the left end.

For words- The word which comes first according to alphabetical series is arranged first and different arrangement is used in different step.

Step 1 and 2- first and second letter are interchanged and third and fourth letter are interchanged

Step 3 and 4- second and fourth letter are interchanged and rests are same.

Step 5- First letter is unchanged, second letter is shifted to fourth place, third letter is shifted to second place, fourth letter is shifted to third place.

For numbers- Numbers start arranging as the highest number is arranged in 1st step then second highest number in second step and so on from left end after each word. And in the final step all the numbers are arranged in increasing order from left end.

Input- 54 roll 39 back 87 25 cash seat 46 beat
Step I- abkc 87 54 roll 39 25 cash seat 46 beat
Step II- ebta 54 abkc 87 roll 39 25 cash seat 46
Step III- chsa 46 ebta 54 abkc 87 roll 39 25 seat
Step IV- rllo 39 chsa 46 ebta 54 abkc 87 25 seat
Step V- sate 25 rllo 39 chsa 46 ebta 54 abkc 87

22. (c);

23. (c);

24. (b);

25. (b); Even number is followed by an odd prime number so =6+5= 11
Then 1 row - 11 2
Odd number is followed by an even number so = 11*2=22 (resultant of first row)
In row 2 Odd number is followed by a perfect square so =11-4 =7
Then 2 row- 7 3
Odd number is followed by an odd number so = 7 +3 = 10(resultant of second row)
So, the sum of both row = 22 + 10 = 32

26. (b); Even number is followed by an prime odd number so =14+ 7 = 21
The row is 21 5
Odd number is followed by an another odd number so =21 +5 = 26(resultant of 1 row)
The resultant of the rows is 44 so the sum of second row= 44- 26 = 18
Even number is followed by X and X is followed by 6
When X = 9, then this condition can be satisfied.

27. (d); Odd number is followed by a perfect square so =7-4= 3
Odd number is followed by an even number so = 3 *8 = 24(resultant of 1st row)
Odd number is followed by a perfect square so =11- 9 = 2
Even number is followed by an odd prime number so = 2 +13 =15(resultant of 2nd row)
So, the difference is = 24 – 15 = 9

Directions (28-30):

Doctors	Meeting hour
Ophthalmologist	7:00 – 8:30 am
Psychiatrist	8:30 – 10:00 am
General physician	10:00- 12:30 am
Orthopedic surgeon	12:30- 3:00 pm
Dentist	3:00- 6:00 pm

28. (d); **29. (b);** **30. (d);**

Directions (31-33):

FLOOR	FLAT-1	FLAT-2	FLAT-3
THIRD	L	R	P
SECOND	O	K	M
FIRST	Q	A	N

or

FLOOR	FLAT-1	FLAT-2	FLAT-3
THIRD	L	R	P
SECOND	O	A	M
FIRST	Q	K	N

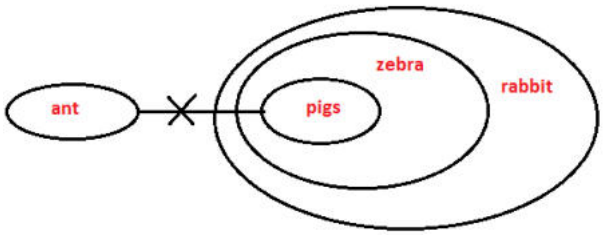
31. (d);

32. (a);

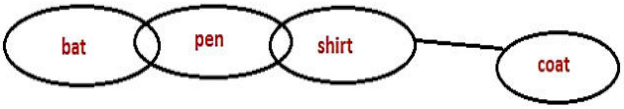
33. (c);

Directions (34-37):

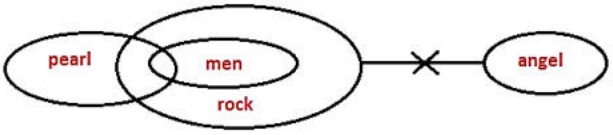
34. (b);



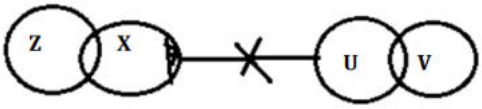
35. (a);



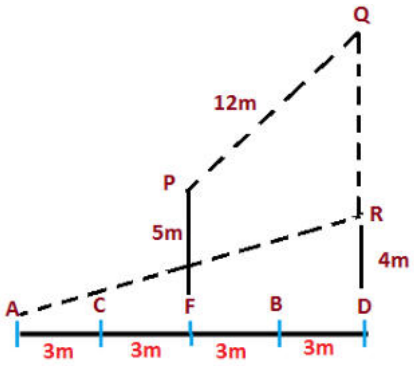
36. (b);



37. (c);



Directions (38-40):



38. (d); 39. (b); 40. (c);

41. (a); In the statement it is given that army should be deployed to rehabilitate the people displaced due to earthquake. It means that army can be used for purposes other than war also. So, assumption I is implicit. Assumption II is not implicit because the word 'only' is making it baseless as there may be some other measures which can rehabilitate the displaced victims of earthquake.

42. (b); A child can learn before he/she turns five. So, assumption I is not implicit. Some schools admit children who are below five years of age, so government gives that advertisement. So, assumption II is implicit.

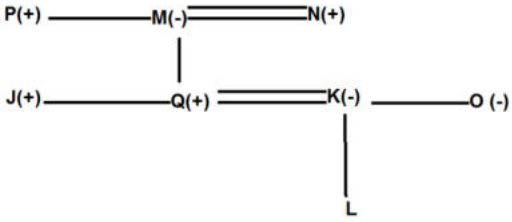
43. (b); Course of action I does not follows due to the words 'all' and 'immediate'. Course of action II follows because a system should be implemented to certify the quality of tiffin provided by the school.

44. (e); Both the actions follow because adequate police force should be deployed and vehicles on the road should be advised a diversion to avoid traffic congestion.

Direction (45-48):

Step 1.

Floor	Person	Blood group	Grade
8	P	AB+	A
7	O	A+	B
6	N	AB-	E
5	M	O+	F
4	L	B+	C
3	K	A-	D
2	J	O-	G
1	Q	B-	H



45. (a); 46. (d); 47. (c);

48. (d);

49. (e); (a) does not follow because the NCR phenomenon can't be extrapolated to "most of the big cities". b) and d) are probable consequences. c) shows us the other side. e) follows from the mention of "slump in home sales" and scope for "price correction".

50. (a); Note that the statement conveys to us that the delay in compensation is now a thing of the past. We can't infer about the specifics- 'insurance company' in statement (c) and 'IRCTC' in statement (d).

QUANTITATIVE APTITUDE

51. (e); $(422 + 478) \div ? \simeq 60 \Rightarrow ? \simeq \frac{900}{60} = 15$

52. (d); $? \simeq \sqrt{256} \times 19 + 8 \times 14$

$? \simeq 16 \times 19 + 8 \times 14 = 416$

53. (b); $16 \times 24 + ? \simeq 19 \times 32$

$? = 608 - 384 = 224$

54. (c); $28 \times 16 \simeq ? \times 14 + 70$

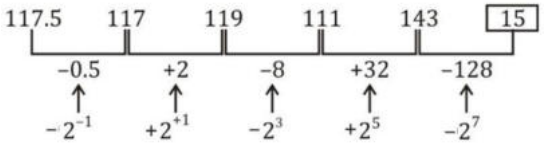
$448 \simeq ? \times 14 + 70$

$? = \frac{378}{14} = 27$

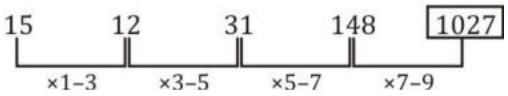
55. (b); $272 + 190 + 84 \simeq ? \times 13 \times 6$

$\Rightarrow ? \simeq \frac{546}{13 \times 6} = 7$

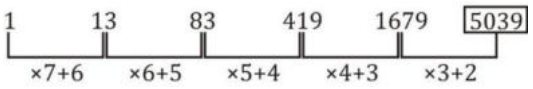
56. (c);



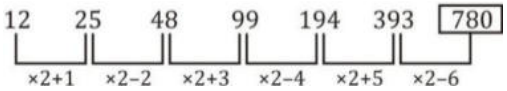
57. (e);



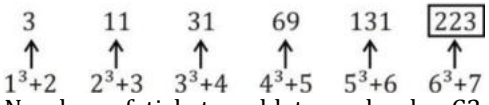
58. (b);



59. (a);



60. (d);



61. (b); Number of tickets sold to males by C3 and C6 theatre together

$= (80-20)\times\frac{2}{5}+(80-12)\times\frac{9}{17}$

$= 60\times\frac{2}{5}+68\times\frac{9}{17} = 24+36 = 60$

Number of tickets sold to females by C3 and C5 theatre together

$= (80-20)\times\frac{3}{5}+(80-8)\times\frac{4}{9}$

$= 60\times\frac{3}{5}+72\times\frac{4}{9} = 36+32 = 68$

Required ratio $= \frac{60}{68} = \frac{15}{17}$

62. (d); Number of female who bought ticket from C2 and C4 theatre together

$= (80-10)\times\frac{4}{7}+(80-14)\times\frac{5}{11}$

$= 40+30 = 70$

Number of male who bought ticket from C5 theatre

$= (80-8)\times\frac{5}{9} = 72\times\frac{5}{9} = 40$

Required $\% = \frac{70-40}{40}\times 100$

$= \frac{30}{40}\times 100 = 75\%$

63. (c); Total revenue earns by C4 theatre

$= 14\times 150+(80-14)\times\frac{6}{11}\times 200+(80-14)\times\frac{5}{11}\times 250$

$= 2100+66\times\frac{6}{11}\times 200+66\times\frac{5}{11}\times 250$

$= 2100+7200+7500 = 16800$

64. (b); Number of male who bought ticket from C1, C2 and C3 together

$= (80-15)\times\frac{6}{13}+(80-10)\times\frac{3}{7}+(80-20)\times\frac{2}{5}$

$= 30+30+24 = 84$

Required average $= \frac{84}{3} = 28$

65. (a); Number of males who bought ticket from C4, C5 and C6 together

$= (80-14)\times\frac{6}{11}+(80-8)\times\frac{5}{9}+(80-12)\times\frac{9}{17}$

$= 36+40+36 = 112$

Number of females who bought ticket from C4, C5 and C6 together

$= (80-14)\times\frac{5}{11}+(80-8)\times\frac{4}{9}+(80-12)\times\frac{8}{17}$

$= 30+32+32 = 94$

Required difference $= 112-94 = 18$

66. (b); (i) $2x^2-5x+3=0$

$2x^2-2x-3x+3=0$

$2x(x-1)-3(x-1)=0$

$(x-1)(2x-3)=0$

$x = 1, \frac{3}{2}$

(ii) $3y^2-4y+1=0$

$3y^2-3y-y+1=0$

$3y(y-1)-1(y-1)=0$

$(3y-1)(y-1)=0$

$y = \frac{1}{3}, 1$

$x \geq y$

67. (c); (i) $x^2-17x+72=0$

$x^2-9x-8x+72=0$

$x(x-9)-8(x-9)=0$

$(x-8)(x-9)=0$

$x = 8, 9$

(ii) $y^2-27y+180=0$

$y^2-12y-15y+180=0$

$y(y-12)-15(y-12)=0$

$(y-15)(y-12)=0$

$y = 15, 12$

$y > x$

68. (b); (i) $(x-12)^2=0$

$x-12=0$

$x=12$

(ii) $y^2-21y+108=0$

$y^2-12y-9y+108=0$

$y(y-12)-9(y-12)=0$

$(y-9)(y-12)=0$

$y = 9, 12$

$x \geq y$

69. (e); (i) $2x^2+7x+5=0$

$2x^2+2x+5x+5=0$

$2x(x+1)+5(x+1)=0$

$(2x+5)(x+1)=0$

$x = \frac{-5}{2}, -1$

(ii) $3y^2+12y+9=0$

$3y^2+9y+3y+9=0$

$3y(y+3)+3(y+3)=0$

$(3y+3)(y+3)=0$

$y = -1, -3$

No relation can be established.

70. (b); (i) $x^2 + 2x - 35 = 0$
$x^2 + 7x - 5x - 35 = 0$
$x(x + 7) - 5(x + 7) = 0$
$(x - 5)(x + 7) = 0$
$x = 5, -7$
(ii) $y^2 + 15y + 56 = 0$
$y^2 + 7y + 8y + 56 = 0$
$y(y + 7) + 6(y + 7) = 0$
$(y + 8)(y + 7) = 0$
$y = -8, -7$
$x \geq y$

71. (b); Speed of Train 'A' on Tuesday
$= \frac{450}{2} = 225$ km/hr
Speed of train 'B' on Monday
$= \frac{450}{3} = 150$ km/hr
Required% $= \frac{225-150}{150} \times 100$
$= \frac{75}{150} \times 100 = 50\%$

72. (d); Speed of train 'B' on Tuesday
$= \frac{450}{4.5} = 100$ km/hr
Speed of train 'A' on Wednesday
$= \frac{450}{3} = 150$ km/hr
Average speed $= \frac{2\times100\times150}{100+150} = 120$ km/hr

73. (a); Speed of train 'A' on Friday $= \frac{450}{4} \times \frac{160}{100} = 180$
Speed of train 'B' on Friday
$= \frac{450}{5} \times \frac{125}{100} = 112.5$
Required sum of time $= \frac{450}{180} + \frac{450}{112.5}$
$= 2.5 + 4 = 6.5$ hr

74. (c); Speed of train 'A' on Tuesday
$= \frac{450}{2} = 225$ km/hr
Speed of train 'B' on Wednesday
$= \frac{450}{1.5} = 300$ km/hr
Required difference = 300 – 225 = 75 km/hr

75. (d); Required time $= \frac{450}{\frac{450}{2}\times1.6} = \frac{450}{360} = 1.25$ hr

76. (a); From only (A) we can say whether Z is a positive integer or not
Explanation: - If we look at Statement A, the condition of Z being a positive integer is being satisfied as putting a negative value will give $Z^7 < Z$. Whereas, in the Statement B, putting both negative as well as positive values of Z will satisfy "$Z^8 > Z$". So, we conjecture that option 'a'is the correct option.

77. (c); From (A) and (B) together value of $4^{\frac{1}{a}} + 4^{\frac{1}{b}}$ can be find out.
Explanation: -
From (A) $\frac{1}{a} + \frac{1}{b} = \frac{6}{5}$
From (B) $ab = 5$
So, value of $4^{\frac{1}{a}} + 4^{\frac{1}{b}}$ can be find out.

78. (e); We can't find the answer as we don't know the capacity of men. In statement 'A' and 'B', we are given about the capacity of women and children not about men.

79. (e); We can't find the chance of getting a red ball because we don't know the number of red balls.

80. (c); When taking both statements together 3w = odd number and 2w = Even number
A and B is possible only when w is an integer
So, both the statements required to answer the question.

Solutions (81-85)
Total number of girls in St. Xavier college and Vijaya college
$= 210 \times 2 = 420$
Let, Number of boys in St. Xavier college = x
And, Number of boys in Vijaya college = y
ATQ,
$x + y = 810$ ... (i)
$\frac{2}{3}x + \frac{2}{5}y = 420$ ... (ii)
On solving (i) & (ii)
$x = 360, y = 450$
Number of girls in St. Xavier college $= \frac{2}{3} \times 360 = 240$
Number of girls in Vijaya college $= \frac{2}{5} \times 450 = 180$

	St. Xavier	Vijaya
Boys	360	450
Girls	240	180

81. (c); Required% $= \frac{180}{240} \times 100 = 75\%$

82. (d); Girls in 'X' college $= 2 \times 320 - 240 = 400$
Total no. of students in 'X' colleges
$= \frac{125}{100} \times [360 + 240] = 750$
Number of boys in 'X' college = 750 – 400 = 350

83. (d); Required difference
$= 450 + 180 - 360 - 240 = 630 - 600 = 30$

84. (b); Number of boys in 'Y' college
$= \frac{450}{9} \times 13 = 650$
Number of girls in 'Y' college $= \frac{80}{100} \times 180 = 144$
Total number of students in 'Y' college
$= 650 + 144$
$= 794$

85. (e); Required% $= \frac{450-360}{360} \times 100 = 25\%$

86. (c); 15 men can complete the work in 'X' days
1 men can complete the work in '15X' days ... (i)
21 women can complete the work in (X – 4) days
1 women can complete the work in 21(X – 4) days ... (ii)
And also,
35 men can complete the work in 'Y' days
1 men can complete the work in '35Y' days ... (iii)

63 women can complete the work in 'Y – 4' days
1 women can complete the work in 63 (Y – 4) days
... (iv)
Equate (i) & (iii) and (ii) & (iv)
$15X = 35Y \Rightarrow \frac{X}{Y} = \frac{7}{3} \Rightarrow Y = \frac{3}{7}X$ .....(v)
$21(X - 4) = 63 (Y - 4) \Rightarrow X - 4 = 3Y - 12$
$\Rightarrow 3Y - X = 8$ ... (vi)
Using (v) and (vi)
$3\left(\frac{3}{7}X\right) - X = 8$
$\frac{9X-7X}{7} = 8 \Rightarrow X = \frac{8\times7}{2} = 28$

87. (b); Let C.P. of A = 2x
C.P. of B = x
Total cost price = 3x
Mark up price $= 3x \times \frac{12}{10} = 3.6x$
ATQ,
$3.6x - 9 = 3x \times 1.17$
$\Rightarrow 3.6x - 3.51x = 9 \Rightarrow 0.09x = 9$
$\Rightarrow x = 100$
C.P. of article A = 200

88. (d); There are two cases
1st case:
1 boy and 4 girls
probability $= \frac{{}^5C_1 \times {}^4C_4}{{}^9C_5} = \frac{5}{126}$ ... (i)
2nd case:
2 boys & 3 girls
Probability $= \frac{{}^5C_2 \times {}^4C_3}{{}^9C_5} = \frac{40}{126}$ ... (ii)
Adding equation (i) and (ii)
Required probability $= \frac{5}{126} + \frac{40}{126} = \frac{45}{126} = \frac{5}{14}$

89. (b); Let, length of train = x m
And, length, of platform = y m
ATQ,
$25 \times \frac{5}{18} = \frac{x+y}{18}$
$\Rightarrow x + y = 125$ ... (i)
And,
$(25 + 5) \times \frac{5}{18} = \frac{x}{12}$
$\Rightarrow x = 100$ ... (ii)
On solving (i) & (ii)
y = 25
Required difference = 100 – 25 = 75

90. (d);

Satish	:	Bhavya	:	Abhishek
15×12	:	$18\times(12-x)$	:	$24(12-x)$
10	:	9	:	12

$\Rightarrow \frac{15\times12}{18\times(12-x)} = \frac{10}{9}$
$\Rightarrow 12 - x = 9 \Rightarrow x = 3$ month

91. (b); Let present age of Sakshi = x
ATQ,
$x = \frac{5}{4}(x - 6) \Rightarrow 4x = 5x - 30 \Rightarrow x = 30$
Present age of her son $= \frac{30}{5} = 6$ years
Required ratio $= \frac{30+10}{6+10} = \frac{40}{16} = \frac{5}{2}$

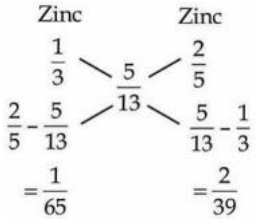
92. (d); Interest earn from scheme 'A' $= \frac{18000\times15\times2}{100}$
$= 5400$
Interest earn from Scheme 'B'
$= 15000\left[\left(1 + \frac{18}{100}\right)^2 - 1\right] = 15000\left[\frac{3924}{10000}\right]$
= 5886
Required difference = 5886 – 5400 = 486

93. (e); 1st Alloy ratio Copper : Aluminium
2 : 3
2nd Alloy ratio Copper : Zinc
2 : 7
In final alloy ratio is 5 : 3
Let quantity → 5x and 3x
Quantity of copper in final alloy
$= \frac{2}{5} \times 5x + \frac{2}{9} \times 3x = \frac{8x}{3}$
Quantity of Aluminium $= \frac{3}{5} \times 5x = 3x$
Required percentage $= \frac{3x - \frac{8x}{3}}{\frac{8x}{3}} \times 100 = 12.5\%$

94. (c); Time to collide $= \frac{20}{10+5} = \frac{4}{3}$ hr
1 minute before collision, distance
$= 20 - \left(\frac{79}{60} \times 5 + \frac{79}{60} \times 10\right)$
$= 20 - \frac{237}{12} = \frac{1}{4}$ km
Alternate method
Relative speed of boats = 5+10 = 15 km/hr
In m/sec
$15 \times \frac{5}{18} = \frac{25}{6}$ m/sec
Distance covered in one minute $= \frac{25}{6} \times 60$
$= 250$ m $= \frac{1}{4}$km

95. (a); $\frac{\pi r^2 h}{2\pi r h} = \frac{616}{352}$
r = 3.5 m
$\pi r^2 h = 616 \Rightarrow h = \frac{616}{11\times3.5} = 16$ m
Total S.A. $= 2\pi rh + 2\pi r^2 = 2\pi r(h + r)$
$= 2 \times \frac{22}{7} \times 3.5(3.5 + 16) = 429$ m^2

96. (b);



Required ratio $= \frac{\frac{1}{65}}{\frac{2}{39}} = \frac{3}{10}$

97. (c); Let efficiency of men of first group is M_1 and second group is M_2
$3M_1 \times 2 = 4M_2 \times 3$
$M_1 = 2M_2$
work $= 40M_1 \times 8 \times 15$
According to question
$40M_1 \times 8 \times 15 \times 2 = 60M_2 \times 4 \times d$
d = 80 days

98. (a); Let speed of boat in still water and speed of stream is x km/hr and y km/hr respectively.
ATQ, $\frac{75}{x+y} = \frac{60}{x-y}$
$75x - 75y = 60x + 60y$
$15x = 135y \Rightarrow x = 9y$
Required percentage $= \frac{10y}{9y} \times 100 = 111\frac{1}{9}\%$

99. (a); Let length of train and platform be 'L and 'P' respectively
1st train cross the pole = 24 s
2nd train (20% faster than first train) Cross the pole $= \frac{24}{6} \times 5 = 20$ s (same length)
Time taken to cross platform = 30 s
ATQ,
$\frac{L+P}{30} = \frac{L}{20} \Rightarrow 2P = L$
$\frac{L}{P} = \frac{2}{1}$

100. (d); In 30 min the part of the tank will be filled by both tap $= \frac{30}{36} = \frac{5}{6}$
Required tap $= 1 - \frac{5}{6} = \frac{1}{6}$
$\frac{1}{6}$ part of the tank will be filled by tank A in 10 min.
∴ tap A will take 60 min.
∴ tap B will take time to fill the tank
$= \frac{1}{36} - \frac{1}{60}$
$= \frac{1}{90}$
∴ Required time = 90 min

ENGLISH LANGUAGE

101. (d); "Consequences of the implementation of wrong and unnecessary economic policies" is the appropriate theme as the passage is about the economic policy failures leading to instability in employment generation and material insecurity to the people. Hence option (d) is the right choice.

102. (e); All the given statements are true as they define the meaning of the phrase as presented by the author.

103. (b); As mentioned in the passage (fifth paragraph), the design flaws in the monetary union in the Eurozone lead to difficulties like unpayable debt burden and decline in economy. Hence sentence (b) is the correct choice.

104. (d); The author has mentioned three reasons behind the economic "combination of outworn bad ideas, incompetence and the malign influence of powerful special interests". Hence both the sentences (a) and (c) are correct.

105. (a); Weisbrot has mentioned, "When the financial bleeding was stemmed, it became glaringly evident that the European authorities, and the ECB, could have intervened much earlier to reduce the damage in the eurozone periphery through monetary and fiscal policies." Hence sentence (a) is the correct choice.

106. (c); **Draconian** means excessively harsh and severe. Hence it has similar meaning to **stringent**. **Innate** means natural.
Inhibit means restrain.
Demure means quiet.
Vex means to confuse or to annoy.

107. (e); All the given sentences are correct in context of the passage. "The Guardian drones, manufactured by General Atomics, will complement India's maritime surveillance aircraft at sea in intelligence, surveillance and reconnaissance", "UAVs have the potential to play a role in enabling the Indian military not only in fighting wars but also in intelligence, reconnaissance and surveillance, and deterring cross-border terrorist attacks.", "The additional capability will free up the navy's Boeing P-81s for anti-submarine warfare (ASW)." "The use of unmanned systems such as drones removes potential political costs".

108. (d); Sentences (b) and (c) are correct while sentence (a) is about Nishant drone. Other two are the features of The Israel Aerospace Industries' (IAI's) Heron TPs.

109. (e); Refer the sixth and seventh paragraphs of the passage, "Modern air defences.....target them". It can be easily inferred that author talks about the existing concern towards the air securities of countries which are vulnerable to attacks. All three statements are related to the facts given in the passage indicating the expression what author means to say. Hence (e) is the correct choice.

110. (d); According to the passage, statements (II) and (III) are correct. Statement (I) does not go in agreement with the passage as it tells about UAV's role in economy which is irrelevant in context of it.

111. (d); The theme of the passage revolves around the import of armed drones by India from USA and Israel. Hence the title 'India's quest for Armed drones' is an appropriate title.

112. (b); **Ludicrous** means foolish or unreasonable. Hence it has same meaning as **preposterous**. **Veracity** means unwillingness to tell lies.
Winsome means charming in a childlike or naive way.
Vociferous means conspicuously and offensively loud.
Detract means divert or reduce.

113. (c); "**drastic, clarity**" is the correct set of words that fit perfectly into the provided blanks. Other words fail to give the contextual meaning to the paragraph. Hence option (c) is the correct choice.
Drastic means likely to have a strong or far-reaching effect; radical and extreme.
Obscurity means the state of being unknown, inconspicuous, or unimportant.
Ambiguity means the quality of being open to more than one interpretation; inexactness.
Equivoque means an expression capable of having more than one meaning; a pun.

114. (d); "**condemned, facet**" is the correct set of words that fit perfectly into the provided blanks. Other words cannot be used as they alter the meaning of the paragraph. Hence option (d) is the correct choice.
Condemned means expressed complete disapproval of; censure.
Facet means a particular aspect or feature of something.
Abrogation means the repeal or abolition of a law, right, or agreement.
Reversal means a change to an opposite direction, position, or course of action.
Detest means dislike intensely.
Denouement means the outcome of a situation, when something is decided or made clear.

115. (a); "**mainstream, elusive**" is the correct set of words that fit perfectly into the provided blanks. Other words are not suitable in the context of the paragraph. Hence option (a) is the correct choice.
Mainstream means belonging to or characteristic of the mainstream.
Elusive means difficult to find, catch, or achieve.
Enticing means attractive or tempting; alluring.
Heterodox means not conforming with accepted or orthodox standards or beliefs.
Subtle means capable of making fine distinctions.
Cynosure means a person or thing that is the centre of attention or admiration.
Fugitive means quick to disappear; fleeting.
Encountering means meeting (someone) unexpectedly.

116. (b); "**published, pursuing**" is the correct set of words that fit perfectly into the provided blanks. Other words fail to give the contextual meaning to the paragraph. Hence option (b) is the correct choice.
Pursuing means engaging in (an activity or course of action).
Proclaimed means announced officially or publicly.
Ensuing means happening or occurring afterwards or as a result.
Suppressed means forcibly put an end to.

117. (a); "**landmark, traditional**" is the correct set of words that fit perfectly into the provided blanks. Other words are not suitable in the context of the paragraph. Hence option (a) is the correct choice.
Landmark means an event or discovery marking an important stage or turning point in something.
Traditional means existing in or as part of a tradition; long-established.
Vestige means a trace or remnant of something that is disappearing or no longer exists.
Compendium means a collection of concise but detailed information about a particular subject, especially in a book or other publication.
Weaving means making (a complex story or pattern) from a number of interconnected elements.
Divergent means tending to be different or develop in different directions.

118. (b); The paragraph is about the opinions on the research regarding developing a technology to turn the brain of terminally ill people into computer simulations. Therefore, the correct sequence of the paragraph is **ABED**C. As, sentences (A), (B) and (D) are in their appropriate positions hence, **sentences (C) and (E)** need to be rearranged to make the paragraph contextually meaningful. Therefore, **option (b)** is the correct answer choice.

119. (c); **Sentence (A)** "Nectome promises to preserve the brains of terminally ill people in order to turn them into computer simulations—at some point in the future when such a thing is possible" is describing about an idea or a plan to develop a technology to transform human brain into computer simulations. Besides, **statement (B)** "It's a startup that's easy to mock. Just beyond the mockery, however, lies an important reminder to remain skeptical of modern artificial intelligence technology" is further questioning about the execution of the idea. Hence, after the rearrangement **sentence (B) should follow sentence (A)** to make the paragraph coherent. Therefore, **option (c) i.e., sentence (B)** is the most viable answer choice.

120. (a); The correct sequence of the paragraph after rearrangement is **ABEDC**. Thus, **sentence (C)** "**Nectome's biggest problem, however, isn't primarily ethical"** is the last sentence in the sequence. As it implies the problems to be faced

by the Nectome company which is not just ethical **[preservation of brain of dead people]** but also the requisition of technology to perform the task of preservation of brain. Thus, the next statement that should follow sentence (C) should be option (a) which is stating about the technology that has been developed to embalm the brain. Hence, **option (a)** is the most suitable choice.

121. (c); **Statements (C) and (D)** can be joined together to form a single coherent sentence using the conjunction "Although". **'Although'** is used to express 'in spite of the fact that; even though.' Therefore, the statement thus formed is **"The majority of the 70 cities surveyed by the NBS still reported monthly price increases for new homes although the number has dropped from January's 52 to Forty-four cities in February."** Hence, **option (c)** becomes the most suitable choice.

122. (b); **Statements (B) and (C)** can be joined together using the phrasal conjunction **"Provided".** 'Provided' is the one that's more often used as a conjunction. It means that one thing happening is dependent on another thing happening. Both the sentences are in the similar context and sentence (B) is dependent on the condition given in statement (C), Therefore the statement thus formed is **"The financial measures now lead to action to seize the assets of Russians provided they have committed human rights abuses or other serious crimes in Russia."** Hence, option (b) is the most viable answer choice.

123. (a); **Option (a)** is the correct choice. **Statements (A) and (D)** can be combined using the phrasal conjunction "**Along with".** 'Along with' means 'in company with or at the same time as'. Thus, the conjunction 'along with' connects both the sentence and the coherent statement thus formed **is "Army Chief General Bipin Rawat today lauded China's military prowess, saying the neighbouring country, along with its economic rise, also focused on military modernisation."** All the other given options fail to connect contextually with one another.

124. (b); Only **sentences (C) and (A)** can be combined coherently using the phrase "so that". "**So that"** is used as a subordinate clause to show purpose or to give an explanation. It is used to show an action producing an intended result or a cause producing an effect. Thus, the statement formed is **"When you need money in 3 years, use your debt funds as your first choice for withdrawals so that you can give your equity fund investments more time to grow in the market."** As all the other combinations fail to make a coherent sentence. Hence, **option (b)** is the correct choice.

125. (c); **Statements (B) and (D)** can be joined together using the conjunction **"Unless".** 'unless' is used to express 'except if (used to introduce the case in which a statement being made is not true or valid).'
Both the sentences are in the similar context and therefore the statement thus formed is **"Unless England absorb the harsh lessons of their worst finish in 31 years, the chances of them prospering in Japan are on a par with Eddie Jones holidaying in Wales in the near future."**
All the other given alternatives are incorrect. Hence, **option (c)** is the most suitable answer choice.

126. (a); The idiom/phrase "**eager beaver**" means **a keen and enthusiastic person who works very hard**. Thus, among the four given statements, only the first sentence provides the exact meaning of the phrase and at the same time it can be replaced by the given phrase without altering the meaning of the sentence. Hence option (a) is the correct choice.
Apathetic means showing or feeling no interest, enthusiasm, or concern.
Mundane means lacking interest or excitement; dull.
Optimist means a person who tends to be hopeful and confident about the future or the success of something.

127. (c); The phrase "**Bolster up**" means **give support, reinforce, strengthen**. Thus, among the four given statements, only the third sentence provides the exact meaning of the phrase and the highlighted word can be replaced by the given phrase without altering the meaning of the sentence. Hence option (c) is the correct choice.
Conjecture means form an opinion or supposition about (something) on the basis of incomplete information.
Gather means come together; assemble or accumulate.
Compute means reckon or calculate (a figure or amount).

128. (b); The phrase "**embark on**" means to begin any course of action. Thus, among the four given statements, only the second sentence provides the exact meaning of the phrase and the highlighted word "**initiate**" can be replaced by the given phrase without altering the intended meaning of the sentence. Hence option (b) is the correct choice.
Confront means come face to face with (someone) with hostile or argumentative intent.
Yield means give way to arguments, demands, or pressure.

129. (a); The phrase "**fallout**" means **the adverse results of a situation or action**. Thus, among the four given statements, only the first sentence provides the exact meaning of the phrase and at the same time it can be replaced by the given phrase without altering the meaning of the sentence. Hence option (a) is the correct choice.
Repercussion means an unintended consequence of an event or action, especially an unwelcome one.
Bereave means be deprived of a close relation or friend through their death.
Meliorate means make (something bad or unsatisfactory) better.

130. (d); The phrase "**go over**" means **consider, examine, or check (something)**. Thus, among the four given statements, only the fourth sentence provides the exact meaning of the phrase and the highlighted word "**consider**" can be replaced by the given phrase without altering the intended meaning of the sentence. Hence option (d) is the correct choice.
Exude means (with reference to moisture or a smell) discharge or be discharged slowly and steadily.
Shed means accidentally allow (something) to fall off or spill.
Percolate means (of a liquid or gas) filter gradually through a porous surface or substance.

131. (a); Only the first part of the sentence or part (A) is grammatically correct and follows the structure in the context of the sentence. However, there are grammatical errors in both the parts (C) and (D). In part (C), there is an error of subject-verb agreement; the subject of the verb "**is**" i.e. "**factors**" should be replaced by its singular "**factor**". In part (D), the preposition "**to**" is not required, it should be removed to make the sentence grammatically and contextually correct. Hence option (a) is the correct choice.

132. (d); There is an error in the part (A) of the sentence. The sentence misses the verb for the subject; thus, the subject "**The Slow Movement**" should be followed by the verb "**is**" to make the sentence grammatically correct and contextually meaningful. The highlighted parts of the sentence do not require any correction as they are grammatically correct. Hence option (d) is the correct choice.

133. (d); Only the part (E) of the highlighted parts is grammatically correct. There are grammatical errors in all the three parts (A), (B) and (D). in the part (A), the singular verb "**has**" should be replaced by its plural "**have**" as the subject is plural [**Many of us**]. In the part (B), the preposition "**with**" should be replaced by "**about**" to give the contextual meaning to the sentence. In the part (D), the expression "**every last scrap off it**" should be replaced by "**every last scrap of it**" to make the sentence grammatically correct. Hence option (d) is the correct choice.

134. (e); The given sentence is grammatically correct. All the highlighted parts along with the ones not highlighted are both grammatically correct and contextually meaningful. Hence option (e) is the correct choice.

135. (a); Only the part (B) of the highlighted parts is grammatically correct. There are grammatical errors in all three parts (C), (D) and (E). In the part (C), the verb "**followed**" should be replaced by "**follow**" as the sentence is in the Present tense. In the part (D), the noun "**authority**" should be replaced by the adjective "**authoritarian**" to give the contextual sense to the sentence. In the last part, the determiner "**its**" should be replaced by "**their**" as the noun it is referring is plural [**escapees**].

136. (b); Option (b) is the correct choice. '**Strive'** means 'make great efforts to achieve or obtain something' which is similar in meaning to '**Covet'**.
Egregious means outstandingly bad; shocking.
Clandestine means kept secret or done secretively, especially because illicit.
Salubrious means health-giving; healthy.
Atypical means not representative of a type, group, or class.

137. (d); '**Bemused'** means puzzled, confused, or bewildered. '**Engrossed'** means absorb all the attention or interest of. Hence, option (d) is correct as they both are antonyms of each other.
Meticulous means showing great attention to detail; very careful and precise.
Surfeit means an excessive amount of something.
Pervasive means (especially of an unwelcome influence or physical effect) spreading widely throughout an area or a group of people.
Fuddled means confused or stupefied, especially as a result of drinking alcohol.

138. (e); **Beguile** means charm or enchant (someone), often in a deceptive way. **Inveigle** means persuade (someone) to do something by means of deception or flattery. As they both have similar meanings, option (e) is the correct choice.
Subversive means seeking or intended to subvert an established system or institution.
Voracious means wanting or devouring great quantities of food.
Vicious means deliberately cruel or violent.
Phlegmatic means (of a person) having an unemotional and stolidly calm disposition.

139. (a); Option (a) is the correct choice. '**Embargo'** means an official ban on trade or other commercial activity with a particular country which has similar meaning to '**prohibition'**.
Philistine means a member of a non-Semitic people of ancient southern Palestine, who came into conflict with the Israelites during the 12th and 11th centuries BC.
Oasis means a fertile spot in a desert, where water is found.
Ostentatious means characterized by pretentious or showy display; designed to impress
Aberrant means departing from an accepted standard.

140. (b); Option (b) is the correct choice. '**Exculpate'** means show or declare that (someone) is not guilty of wrongdoing. **'Condemn'** means sentence (someone) to a particular punishment, especially death. Hence, they both have opposite meanings.
Ameliorate means make (something bad or unsatisfactory) better.
Coagulate means (of a fluid, especially blood) change to a solid or semi-solid state.
Torpor means a state of physical or mental inactivity; lethargy.
Satiate means satisfied to the full; sated.

adda247

Mock 30

IBPS Clerk Mains 2016

REASONING ABILITY

Direction (1-4): Study the following information carefully to answer the given questions.
In a certain code language-
"work for earning money" is coded as "Go3 None5 Xor4 Farnin7"
"like six years passed" is coded as "Ti3 Qasse6 Zear5 Mik4"
"hence good amount received" is coded as "Seceive8 Ienc5 Hoo4 Bmoun6"

1. What is the code for "last earning was money"?
(a) Xa3 Mas4 Noney5 Farnin7
(b) None5 Xa3 Mas4 Darnin7
(c) None5 Mas4 Farnin7 Xa3
(d) Mas4 Lone5 Farnin7 Xa3
(e) None of these

2. If "money makes man perfect" is coded as "Nake5 Qerfec7 Na3 None5", then what is the code for "good people always perfect" ?
(a) Qeople6 Hoo4 Blway6 Qerfec7
(b) None of these
(c) Hoo4 Qerfec7 Blway6 Qeopl6
(e) Qeople6 Hoo4 Qerfect7 Blway6
(e) Qerfec7 Blway6 Qeople5 Hoo5

3. What is the code for "hence always wrong hance"?
(a) Can't be determined
(b) Blway6 Iance5 Xron5 Ienc5
(c) Ianc5 Xron5 Blway5 Ienc5
(d) Ianc5 Xron5 Ienc4 Blways6
(e) Blway6 Ienc5 Ianc5 Xron5

4. "Farming" is coded as?
(a) None of these (b) Garmin7
(c) Gramin8 (d) Garing8 (e) Earnin7

Direction (5-10): Read the given information carefully and answer the given questions.
There are five units i.e. 1, 2, 3, 4 and 5. Each unit has a different height. Also each unit contains books and boxes. unit2 is above unit1 and unit3 is above unit2 and so on. Every unit belongs to different country i.e. Beijing, Paris, London, Sydney and Zurich. The total height of all five units is equal to 252"ft.
***Total Height of Unit is equal to the total height of books plus total height of boxes in each unit.**
***Height of books is not equal to the height of boxes. Unless specified so.**
The unit belongs to London is an even unit. The total height of unit1 is 75" ft. Sydney does not belong to unit1. The total height of unit, which belongs to Sydney is 55"ft. There is only one unit between the units which belongs to London and Paris. The height of books and height of boxes in unit3 are equal. The height of books in unit2 is not less than 30"ft. The height of books in unit4 is 4"ft more than height of books which is in unit3. The total height of unit which belongs to London is not 37"ft. Unit which has 37"ft will not be immediate above to unit which has 20"ft more height than unit which belongs to Sydney . The height of boxes in unit2 is 23"ft. Unit belongs to Zurich does not equal height of books and boxes. The total height of unit2 is an odd number and more than 50"ft and less than 55"ft. Height of boxes in unit 1 is 23"ft more than unit4. Height of books in unit 5 is 7"ft less than the height of books of unit 1.

5. What is the total height in unit3?
(a) 37"ft (b) None of these (c) 32"ft
(d) 53"ft (e) 75"ft

6. Unit3 belongs to which country?
(a) Paris (b) Zurich (c) Sydney
(d) Beijing (e) London

7. If 'Sydney' is related to 37"ft in the same way as 'Beijing' is related to 53"ft.Which of the following is 'Paris' related to, following the same pattern?
(a) 53"ft (b) 37"ft
(c) 75"ft (d) None of these
(e) 32"ft

8. Four of the following five are alike in a certain way and hence they form a group. Which one of the following does not belong to that group?
(a) Sydney (b) 32"ft (c) 75"ft
(d) Paris (e) Beijing

9. What is the height of box in unit 4?
(a) 23'ft (b) 17"ft (c) 27"ft
(d) 40"ft (e) 20"ft

10. Which unit contains 30"ft book?
(a) None of these (b) Unit2
(c) Unit3 (d) Unit1
(e) Unit5

Direction (11-15): Read the given information carefully and answer the given questions.
There are eight persons A, B, C, D, E, F, G and F are sitting around a circular table. All of them are facing the center, but not necessarily in the same order.
B sits third to the left of H. There are only one person sits between H and H's husband. G is the husband of A. D sits immediate left of B. C sits third right of A, but C is not immediate neighbor of H's husband. There are three person's sits between A and her husband. C is the spouse of F. B's spouse does not sits immediate right of A's husband.

11. Who sits second right of F?
(a) E (b) None of these (c) D
(d) G's wife (e) B

12. How many person sits between E's wife and G's wife?
(a) None (b) Two (c) One
(d) Three (e) Five

13. Four of the following five are alike in a certain way and hence they form a group. Which one of the following does not belong to that group?
(a) G (b) H (c) B
(d) E (e) A

14. Who sits immediate left of H's husband?
(a) C's spouse (b) G
(c) None of these (d) H (e) B's spouse

15. If C is related to B in the same way as E's wife is related to A's husband. Which of the following is 'G's wife' related to, following the same pattern?
(a) G (b) F (c) D
(d) H's husband (e) None of these

Directions (16-19): Each of the questions below consists of a question and three statements numbered I, II and III given below it. You have to decide whether the data provided in the statements are sufficient to answer the question.
(a) If statement II and III are sufficient to answer the question, but statement I alone is not sufficient to answer the question.
(b) If all the statements I, II and III taken together are not sufficient to answer the questions.
(c) If statements I and II is sufficient to answer the question, but statement III is not sufficient to answer the question.
(d) If all the statements I, II and III taken together are sufficient to answer the questions.
(e) If statement I and III are sufficient to answer the question, but statement II alone is not sufficient to answer the question.

16. Who among A, B, C, D, E and F is the tallest?
(I) Only two of them are taller than C.
(II) D is shorter than F.
(III) C is taller than A, but shorter than F and B.

17. How is M related to O?
(I) J is the sister of K, who is the son of M. L is the brother of M and R is brother of O.
(II) L is the brother of M. M is the son of Q.
(III) M is the son of R, who is the husband of Q.

18. Who amongst S, T, U, V, W and X is the tallest person?
(I) X is taller than W but smaller than U. U is smaller than T.
(II) U is taller than S and W but smaller than T. T is not the tallest person
(III) V is taller than T and U. W is not the smallest person.

19. In which direction point D with respect to point M?
(I) Point M is towards west of point E, who is the north-west of point P.
(II) Point P is to the east of point S. Point M is the north of point S.
(III) Point C is the west of point D. Point D is the west of point S.

20. "We have formulated a 10-point programme to curb molestation cases against woman and we are confident of restricting the eve-teasing cases with the help of our sincere cops"- Director General of Police of city 'X'.
Which of the following, if true, would weaken the statement?
(a) City 'X' is known among those cities where they are least crime records.
(b) City 'X' is the most populated city in the world.
(c) On several occasions women have complained against police cops and have charged them of indulging in eve-teasing.
(d) Literacy rate of city 'X' is the highest amongst all cities.
(e) Many NGOs are cooperating with the police forces in ensuring a peaceful life in city 'X'.

Direction (21-25): Read the given information carefully and answer the given questions.
Two buses A and B starts their journey from same depot but not necessary in the same order. Bus A starts moving in north direction and covers a distance of 6 km to reach point P then take a right turn and move 18km to reach point R, then it takes a left turn and move 12km to reach point S. Point P, Q and R lies in a same line. Distance between P and Q is half of the distance between point Q and R. Bus B starts moving in west direction and move by 2km more than the distance between point Q and R from depot and reach point W, than from point w it takes a right turn and walk 18km to reach point U. U, V and W lies in the same line as distance between point V and W is double of the distance between point U and V. From point U, bus B take a right turn and reach point S. Point T lies between U and S in exact midway.

21. What is the total distance between U and S?
(a) 29km (b) 32km (c) 36km
(d) 30km (e) 28km

22. In which direction is point T with respect to point W?
(a) North (b) South
(c) North West (d) North East
(e) South West.

23. A boy want to go to the bus depot so he starts walking toward north from Point W after reaching point V he suddenly realize that he is going in the wrong direction. So, what is the shortest route from point V to the bus Depot?
(a) Back to point W then go to depot from there.
(b) From point V he should go in the east direction 20km than move toward south to reach point Q and then reach P and then to the depot.
(c) From point V he should go towards north to reach point U from there, he should reach point S than point R than P than depot.
(d) Both (a) and (b)
(e) Can't determine.

24. What is the distance between T and S?
(a) 14km (b) 12km (c) 16km
(d) 18km (e) 6km

25. Bus A is moving in which direction currently?
(a) West (b) North-east (c) South
(d) North (e) East

26. A government survey released today shows that 80% of the people who fly are satisfied with the service they receive from the airlines in this country. Three interviewers stood outside a major airport and asked people leaving the terminal, "Do you have any complaints about the flight you just got off?" Only 20 percent responded "yes!"
Which of the following, if true, would most **undermine** the conclusion of the argument above?
(a) Sixty percent of the people coming out of the airline terminal were not people who had just gotten off a flight.
(b) One percent of the people approached by the interviewers refused to respond to their inquiries.
(c) The interviewers began their inquiry just after passengers were discharged from a flight that was 40 minutes late.
(d) The interviewers were able to speak to only 70 percent of the people leaving the terminal, but those people were selected at random.
(e) For six months following the day of the interviews, no official complaints were filled by any passenger with the Federal agency that regulated the airlines.

Direction (27-32): Read the given information carefully and answer the given questions.
There are seven persons in a family namely A, B, C, D, E, F and G. All of them related with each other in a order. Also, each person has a different age. The information is given as-
A is older than B but younger than E. The third oldest person in the family is 38 years old. B is the sister of A. C is the father of A. The third youngest person of the family is 35 years old. G is the oldest person of the family. B is the niece of F. E is older than B. F is the husband of E. G and D are married couple. C's mother is 69-year-old. C is younger than F. Oldest person of the family is male member. C is not 35 years old.

27. If total age of D and B is 75 years, then what is the age of B?
(a) 40 years (b) 37 years
(c) 6 years (d) None of these
(e) 10 years

28. How is D related to A?
(a) Grandfather (b) Mother
(c) Can't be determined (d) Grandmother
(e) Father

29. Who among the following person is 35 years old?
(a) A (b) E (c) F
(d) C (e) D

30. How many person/s are older than A?
(a) Six (b) Four
(c) None of these (d) Three
(e) Five

31. What is the possible age of C?
(a) 52 years (b) 39 years (c) 37 years
(d) 29 years (e) None of these

32. What is the possible age of oldest person of the family?
(a) 74 year (b) 68 year (c) 62 year
(d) 80 year (e) Both (a) and (d)

33. **Statement** The annual requirement of blood in our country is 6 million units whereas the generation is only 3.5 million units per annum at present.
Courses of action
I. Blood donors should be attracted by telling them how the act of donating blood would improve their health.
II. Blood donors should be attracted by providing them monetary incentives.
III. More and more private blood banks should be encouraged.
(a) Either I or II follows (b) I and II follow
(c) II and III follow (d) All follow
(e) Only I follow

Directions (34-35): Given below are pairs of events 'A' and 'B'. You have to read both the events 'A' and 'B' and decide their nature of relationship. You have to assume that the information given in 'A' and 'B' is true and you will not assume anything beyond the given information in deciding the answer. Mark answer

(a) If 'A' is the effect and 'B' is its immediate and principal cause.
(b) If 'A' is the immediate and principal cause and 'B' is its effect.
(c) If 'A' is an effect but 'B' is not its immediate and principal cause.
(d) If 'B' is an effect but 'A' is not its immediate and principal cause.
(e) None of these

34. Statement (A): The government has decided to roll back the hike in the prices of cooking gas and kerosene.
Statement (B): Some ministers had resigned in protest against the hike in prices of cooking gas and other petroleum products.

35. Statement (A): A traveler found cockroaches in the crevices of his seat and also in the toilets of India's most prestigious train, the Rajdhani Express.
Statement (B): He drew the attention of catering manager, Western Railway, to the insects.

Direction (36-40): Read the given information carefully and answer the given questions.
There are eight persons namely A, B, C, D, E, F, G and H has born in the same month of different year i.e. 1969, 1972, 1978, 1981, 1989, 1997, 2000 and 2005. Their age are considered as on the same month of 2016. G is born in even number year, but not born in the year, which does not divisible by 4. A is 35 years old now. B is 17 years older than F, who is 8 years younger than A. There are eight years gap between age of E and age of D. H is nine years younger than C, but not born in 2005. E, was born earlier than G.

36. In which year does F born?
(a) 1969 (b) 1989 (c) 2005
(d) 1981 (e) 1978

37. What is the age of G in 2016?
(a) 11 years (b) 18 years (c) 26 years
(d) 16 years (e) 35 years

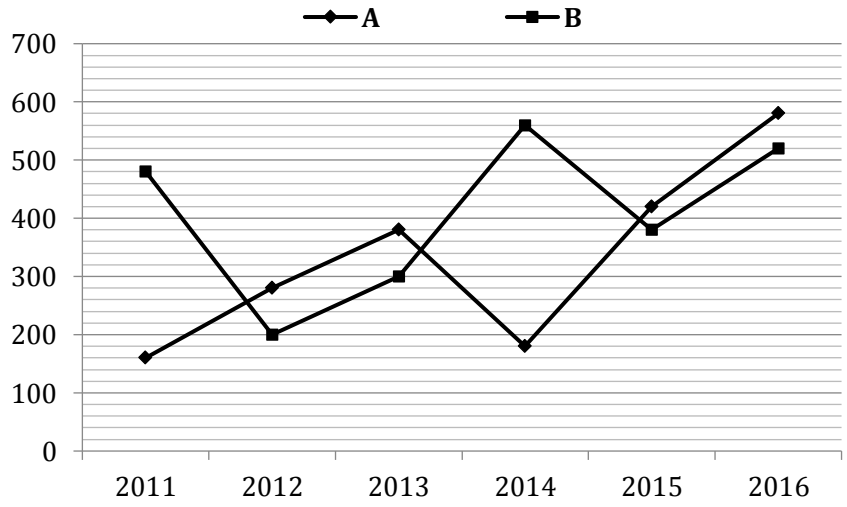
38. Four of the following five are alike in a certain way and hence they form a group. Which one of the following does not belong to that group?
(a) 1969 (b) 1978 (c) 2005
(d) 1981 (e) 1997

39. By how many years B was born before E?
(a) 24 years (b) None of these
(c) 30 years (d) 19 years (e) 25 years

40. How many years gap between C and D?
(a) 33 years (b) 16 years (c) 36 years
(d) None of these (e) 27 years

QUANTITATIVE APTITUDE

Directions (41-45):- Refer the graph and answer the given questions.
The following line graph shows the number of products sold by company A and B during six years.



41. What is the ratio of the total number of products sold by A and B together in 2012 to the total number of products sold in these two companies together in 2015?
(a) 12 : 25 (b) 3 : 5 (c) 4 : 3
(d) 5 : 3 (e) None of these

42. Out of the total number of products sold by A and B together in 2011, only 20% are defected. What is the total number of defected products sold by A and B together in 2011 ?
(a) 228 (b) 128 (c) 160
(d) 148 (e) 138

43. The number of products sold by A in 2014 is what per cent of the number of products sold by B in 2013?
(a) 60% (b) 50% (c) 48%
(d) 56% (e) None of these

44. The number of products sold by B increased by what percent from 2011 to 2014 ?
(a) $14\frac{2}{3}\%$ (b) $16\frac{2}{3}\%$ (c) $24\frac{2}{3}\%$
(d) $18\frac{2}{3}\%$ (e) $25\frac{1}{3}\%$

45. What is the difference between the total number of products sold by B in 2011, 2012 and 2016 together and the total number of products sold by A in 2011, 2012 and 2013 together?
(a) 480 (b) 360 (c) 580
(d) 380 (e) 280

Directions (46-50): Study the table carefully and answer the following questions.

Village	% of people having Bank account out of total population in the village	Out of people having Bank Account	
		% male among the total people having Bank Account	% of Inoperative Bank Account
A	45%	60%	40%
B	60%	30%	10%
C	60%	70%	30%
D	55%	50%	20%
E	35%	40%	60%

46. If the population in village A and C are in ratio of 2:1 then, what is the ratio of inoperative Bank Account in Bank A and C?
(a) 1 : 3 (b) 3 : 2 (c) 1 : 2
(d) 4 : 5 (e) None of these

47. If out of the total inoperative Bank account in village B half account holder is female which is equal to 300, then find the total population of village B?
(a) 10000 (b) 12000 (c) 14000
(d) 8000 (e) 9000

48. If the population of village C and D are in ratio of 1 : 2, then number of people in village C having Bank account is approximately what percent less or more than that of village D?
(a) 49.45% (b) 42.45% (c) 47.45%
(d) 43.45% (e) 45.45%

49. If the ratio of population in village A, B and C are in 1 : 2 : 3 then what percent of people in village A, B and C together have a bank account.
(a) 51.5% (b) 52.5% (c) 59.5%
(d) 57.5% (e) 55.5%

50. Percentage of inoperative Bank account in Village E is by what percent more than the percentage of operative Bank accounts in the same village:
(a) 45% (b) 50% (c) 60%
(d) 55% (e) 75%

Directions (51-55): The following questions are accompanied by three statements (A), (B), and (C). Determine which statement(s) is/are sufficient/necessary to answer the questions.

51. What is the price of a chair?
A. The price of three tables is equal to the price of seven chairs.
B. The difference between the price of a table and that of a chair is Rs 900.
C. The price of one table is $133\frac{1}{3}\%$ more than the price of one chair.
(a) Only A and B together are sufficient
(b) Only A and C together are sufficient
(c) All together are necessary
(d) B and either A or C together are sufficient
(e) Even all A, B and C together are not sufficient

52. What is rate of interest per annum?
A. The amount becomes Rs 9331.20 in 2 years at compound interest.
B. The difference between CI and SI at the same rate of interest in 2 yrs is Rs 51.20.
C. The amount invested in Rs 8000.
(a) Only A and B together
(b) Only B and C together
(c) B and either A or C only
(d) C and either A or B only
(e) Any two of them

53. Find the number of days in which Q can do a job if P can do the same job in 8 days.
A. Q is 60% more efficient than P.
B. P and Q together can do the job in $3\frac{1}{13}$ days.
C. P is $37\frac{1}{2}\%$ less efficient than Q.
(a) Only A is sufficient
(b) Only B is sufficient
(c) Either A or B is sufficient
(d) Any of them
(e) A and C together are sufficient

54. What is the non-voting population of a certain country?
A. Only males above 21 years of age can vote while no female can vote.
B. Males above 21 years form 30% of the total population.
C. The total population of the country is 30 million.
(a) A only (b) B only (c) C only
(d) A and C only (e) None of the above

55. A shopkeeper sold an article and got Rs 300 as profit. Find the profit percentage?
A. Selling price of the article is Rs 1200.
B. He gave 25% discount, which is Rs 400, on the labelled price
C. Cost price of the article is Rs 900.
(a) Any two of them (b) Any of them
(c) B and either A or C (d) Either A or C only
(e) A and C together

Directions (56-60): Equation number I and II are given. You have to solve both the questions and answer.

56. **I.** $x^2 = 144$ **II.** $y^2 - 24y + 144 = 0$
(a) $x \leq y$
(b) $x \geq y$
(c) Relationship between x and y cannot be determined
(d) $x < y$ (e) $x > y$

57. **I.** $2x^2 - 9x + 10 = 0$
II. $2y^2 - 13y + 20 = 0$
(a) $x \leq y$
(b) $x \geq y$
(c) Relationship between x and y cannot be determined
(d) $x < y$ (e) $x > y$

58. **I.** $x^2 - 15x + 56 = 0$
II. $3y^2 - 18y + 15 = 0$
(a) $x > y$
(b) $x \geq y$
(c) $x < y$
(d) $x \leq y$
(e) $x = y$ or the relationship cannot be established

59. **I.** $\sqrt{200x} + \sqrt{102} = 0$ **II.** $\sqrt{160y} + \sqrt{200} = 0$
(a) $x > y$ (b) $x \geq y$
(c) $x < y$ (d) $x \leq y$
(e) $x = y$ or the relationship cannot be established

60. **I.** $(13)^2 - 14 + 28 = x$ **II.** $(16)^2 - 8 \times 7 = y$
(a) $x > y$
(b) $x \geq y$
(c) $x < y$
(d) $x \leq y$
(e) $x = y$ or the relationship cannot be established

61. One fill pipe A takes 3 minutes more to fill the cistern than two fill pipes A and B opened together to fill it. Second fill pipe B takes $21\frac{1}{3}$ minutes more to fill cistern than two fill pipes A and B opened together to fill it. When will the cistern be full if both pipes are opened simultaneously.?
(a) 7 minutes (b) 16 minutes
(c) 8 minutes (d) 10 minutes
(e) 12 minutes

62. In an examination P scored 25 marks less than Q. Q scored 45 more marks than R. T scored 75 marks which is 10 more than R. U's score is 80 less than maximum marks of the test. What approximate percentage of marks did U score in the examination if he gets 10 marks more than R?
(a) 90% (b) 70% (c) 80%
(d) 60% (e) 85%

63. The largest and the smallest angles of a triangle are in the ratio of 3:1 respectively. The second largest angle of the triangle is equal to 56°. What is the value of largest angle of the triangle?
(a) 49° (b) 129° (c) 123°
(d) 93° (e) None of these

64. The difference between the sum of four consecutive odd numbers and three consecutive even numbers together is 20. Also, the largest even number is 5 more than the largest odd number. What is the sum of the smallest odd number and the smallest even number ?
(a) 77 (b)71 (c) 879
(d) 83 (e) Cannot be determined

65. Anoop sells a book to Mayank at a profit of 20% and Mayank sells this book to Siddharth at a profit of 25%. Now Siddharth sells this book at a loss of 10% to Shishir. At what percentage loss should Shishir sells this book now so that his SP becomes equal to Anoop's CP?
(a) 36.68% (b) 25.92% (c) 48.66%
(d) 16.46% (e) Cannot be determined

66. A shopkeeper marks up the price of his product by 40%. If he increases the discount from 5% to 10%, the profit would decrease by Rs 14. How much profit would he earn if he gives a discount of 20% on the marked price?
(a) Rs. 56 (b) Rs. 28 (c) Rs. 32
(d) Rs. 24 (e) Rs. 38

67. Monica deposited a total of Rs. 10500 with a bank in two different deposit schemes at 10% p.a., interest being compounded annually. As per the schemes, she gets the same amount after 2 years on the first deposit as she gets after 3 years on the second deposit. How much money did she deposit for 3 years?
(a) Rs. 4500 (b) Rs. 5000 (c) Rs. 6500
(d) Rs. 7200 (e) None of these

68. Sapna borrowed a certain sum of money from Kavita under the following repayment scheme based on simple interest. 8% p.a. for the initial 2 years, 9.5% p.a. for the next 4 years, 11% p.a. for the next 2 years, 12% p.a. after the first 8 years. Find the amount which a sum of Rs. 9000 taken for 12 years becomes at the end of 12 years?
(a) Rs. 20160 (b) Rs. 22350
(c) Rs. 23470 (d) Rs. 24567
(e) None of these

69. A, B and C enter into a partnership. A invests Rs. 8000 for the whole year, B puts in Rs. 12000 at the first and increasing to Rs. 16000 at the end of 4 months, whilst C puts in at first Rs. 16000 but withdraw Rs. 4000 at the end of 9 months. Find the profit of A at the end of year, if the total profit is Rs. 22600?
(a) Rs. 4800 (b) Rs. 4600 (c) Rs. 4750
(d) Rs. 4300 (e) None of these

70. Two places P and Q are 92 km apart. A train leaves P for Q and at the same time another train leaves Q for P. Both the trains meet 4 hrs after they start moving. If the train travelling from P to Q travels 7 km/hr faster than the other train, find the speed of the two trains?
(a) 15 km/hr, 8 km/hr (b) 12 km/hr, 8 km/hr
(c) 12 km/hr, 9 km/hr (d) 15 km/hr, 9 km/hr
(e) None of these

71. A and B working together, can do a piece of work in $4\frac{1}{2}$ hours. B and C working together can do it in 3 hours. C and A working together can do it in $2\frac{1}{4}$ hours. All of them begin the work at the same time. Find how much time they will take to finish the piece of work?
(a) 3 hours (b) 2 hours (c) 2.5 hours
(d) 1 hours (e) None of these

72. Raman took a loan of Rs. 15000 from Laxman. He agreed that for the first three years rate of interest charged would be at 8% Simple Interest per annum and at 10% Compound Interest (compounded, annually) from the fourth year onwards. Ram did not pay anything until the end of the fifth year. How much would he repay if he clears the entire amount, only at the end of fifth year (inRs.) ?
(a) Rs. 22506 (b) Rs. 22105
(c) Rs. 22900 (d) Rs. 22500
(e) Rs. 22450

73. Ram and Shyam are travelling from point A to B, which are 60 km apart. Travelling at a certain speed ram takes one hour more than Shyam to reach point B. If Ram doubles his speed he will take 30 minutes less than Shyam to reach point B. At what speed was Ram driving from point A to B ?
(a) 15 kmph (b) 35 kmph (c) 30 kmph
(d) 25 kmph (e) 20 kmph

74. 6 litres are drawn from a cask full of wine and it is then filled with water. 6 litres of the mixture are drawn and the cask is again filled with water. The quantity of wine now left in the cask is to that of the water in it as 121 : 23. How much does the cask hold?
(a) 54 litres (b) 62 litres (c) 70 litres
(d) 72 litres (e) None of these

75. A passenger train leaves Calcutta at 4 PM and travels at the rate of 30 kilometres an hour. The mail train leaves Calcutta at 9 PM and travels, on a parallel line of rails, at the rate of 45 km an hour, when will the second train overtake the first?
(a) 10 hrs after the first train start
(b) 12 hrs after the second train starts
(c) 10 hrs after the second train starts
(d) 12 hrs after the first train starts
(e) None of these

Directions (76-80): What will be come in place of question mark (?) in the following number series ?

76. 14 8 7 11.5 22 ?
(a) 54 (b) 64 (c) 62
(d) 58 (e) 56

77. 8 14 25 46 82 ?
(a) 132 (b) 130 (c) 138
(d) 168 (e) 148

78. 13 14 30 93 ? 1885
(a) 358 (b) 336 (c) 364
(d) 376 (e) 356

79. 17, 52, 158, 477, ?, 4310
(a) 1433 (b) 1432 (c) 1435
(d) 1434 (e) None of these

80. 3, 22, ?, 673, 2696, 8093
(a) 133 (b) 155 (c) 156
(d) 134 (e) None of these

ENGLISH LANGUAGE

Directions (81-88): Read the following passage carefully and certain words in the passage are printed in bold letters to help you locate them easily while answering some of these questions.

The Indian economy is currently passing through a phase of relatively slow growth. However, this should not cloud the fact that over the nine-year period beginning 2005-06, the average annual growth rate was 7.7 per cent. Against this background, the relevant question is whether India has the capability to grow at 8-9 per cent in a sustained way. In short, what is the potential rate of growth of India? Normally, potential growth is measured using trends with some filters. In one sense, these are backward-looking measures, since they depend on historically observed data. In the case of measuring capacity utilisation in manufacturing, the maximum capacity is very often taken as the maximum output achieved in the recent period. Perhaps, in the case of determining the potential rate of growth of the economy also, one can take the maximum growth rate achieved in the recent past as the lowest estimate of the potential. However, this assumption will be valid only if there is reason to believe that the maximum growth rate achieved in the recent past was not a one-off event and that the growth rate achieved was robust and replicable.

India achieved a growth rate of 9.5 per cent in 2005-06, followed by 9.6 per cent and 9.3 per cent in the subsequent two years. After declining a bit in the wake of international financial crisis, the growth rate went back to 8.9 per cent in 2010-11. In many ways the growth rate achieved in the high phase period of 2005-06 to 2007-08 was robust. The domestic savings rate during this period averaged 34.9 per cent of GDP. Similarly, the gross capital formation rate averaged 36.2 per cent. The current account deficit (CAD) remained low with an average of 1.2 per cent of GDP. Agricultural growth during this period averaged 5 per cent, and the annual manufacturing growth rate was 11 per cent. The capital flows were large but as the CAD remained low, the **accretion** to reserves amounted to $144 billion. Inflation during the period averaged 5.2 per cent. The combined fiscal deficit of the Centre and States was 5.2 per cent of GDP, well below the stipulated 6 per cent. Thus on many dimensions the growth rate was robust. Unlike in the 1980s when the pick-up in growth was accompanied by deterioration in fiscal deficit and current account, the sharp increase in growth between 2005-06 and 2007-08 happened with the stability parameters at desired levels. Also, a booming external environment provided good support.

To assess whether the high growth phase can be replicated, we need to understand the factors that led to the slowdown since 2011-12. Complicating the analysis of this period is the revision of national income numbers with a new base. The two sets of numbers present a somewhat differing picture. According to the earlier series, the growth rate of the Indian economy fell below 5 per cent in 2012-13 and 2013-14. But the new series shows a decline below 5 per cent only in 2012-13. For 2013-14, the new series records a growth rate of 6.6 per cent, as against 4.7 per cent according to the earlier estimate. For 2014-15 and 2015-16, there is only one set of numbers, that is, according to the new series. For both the years the growth rate is above 7 per cent. These are good growth rates under any circumstance, let alone the current global situation. Anyway, we have come down from the growth rate of 9-plus per cent which we had seen earlier.

Three sets of reasons are attributed for the slowdown. First, the external environment had deteriorated sharply. The recovery from the crisis of 2008 was **tepid**. One country after another in the developed world came under pressure. Strangely, however, international commodity prices including crude oil prices remained high until a couple of years ago. All this had an adverse impact on developing countries, including India. However, it would be wrong to attribute the slowdown in India primarily to external factors. The domestic factors are the key. Second, there were severe supply bottlenecks. Agricultural production fell sharply in 2009-10 because of a severe drought. This triggered an inflation which lasted for several years thereafter. Coal output fell. Iron ore output fell, partly because of court decisions. The third set of reasons is basically non-economic which led collectively to a weakening of investment. A multitude of issues relating to scams and perceived delays in decision-making created an element of uncertainty in the minds of investors. New investments began to fall.

The rise in investment rate must be supported by a rise in the domestic saving rate. An increase in investment rate supported by a widening current account deficit is not sustainable and is fraught with serious consequences. Only a current account deficit in the region of 1 to 1.5 per cent is sustainable. Incremental capital output ratio is a catch-all variable which is influenced by a host of factors. Obviously, it depends on technology. It also depends upon the skill of the labour force which in turn depends on the quality of the education system. Another catch-all expression "ease of doing business" is also relevant (i.e.) bureaucratic hurdles which **impede** speedy execution of projects need to be removed. Thus improving the productivity of capital needs action on several fronts.

Making a prediction about the future is always hazardous. Many things can go wrong. The Indian economy in the recent past has shown that it has the **resilience** to grow at 8 to 9 per cent. Therefore achieving the required investment rate to support such a high growth is very much in the realm of possibility. However, we need to overcome the current phase of declining investment rate. Investment sentiment is influenced by non-economic factors as well. An environment of political and social **cohesion** is imperative. Equally, we can get the incremental capital-output ratio (ICOR) to a lower level. Raising the productivity of capital will require policy reforms including administrative reforms as well as firm-level improvements. The "potential" to grow at 8 to 9 per cent at least for a decade exists. We have to make it happen.

(The topic of the Passage asked in the exam was based on the economic changes in the last 50 years)

81. In context of the given passage, which of the following is/are the reason for economic slowdown of India?
(a) Jaunty recovery from the crisis of 2008
(b) Court's verdict to stop production of coal.
(c) domestic barriers like draught, inflation etc.
(d) Various barriers introduced by the government.
(e) All of these

82. According to the given passage, what does 'ease of doing business imply?
(a) End of bureaucracy
(b) Eliminating nepotism
(c) Availability of funds
(d) Eliminating Red tapism
(e) Not clear from the passage

83. On what factor(s) do(es) incremental capital output ratio NOT depend?
(a) Technology
(b) Skilled labour
(c) Better education system
(d) Low fiscal deficit
(e) It depends on all the given options

84. On the basis of the given passage, which of the following options cannot be inferred?
(a) Corruption is one of the reasons for the economic slowdown of India
(b) There is a dissimilitude between the calculations based on new base and the previous one.
(c) The Indian economy experienced a great robust throughout the previous decade.
(d) Fiscal deficit below six percent is proviso.
(e) Nature also played an important role in slowing down Indian economy.

85. According to the given passage, which of the following option is the best reason which supports the author's conclusion that 'high growth is very much in the realm of possibility'?
(a) Flourishing service, agricultural and manufacturing sectors of India.
(b) Policy reforms introduced by the current government.
(c) Increasing growth rate and investment rate
(d) India's potential to grow at a high rate
(e) None of these

86. On the basis of your reading, choose an appropriate title for the passage.
(a) The Indian economy: The phase of sluggish growth.
(b) India's potential.
(c) India's promising past results.
(d) Can India grow fast: An introspection
(e) Ease of doing business

Directions (87-88): Choose the word/group of words which is **MOST SIMILAR** in meaning to the word/group of words printed in bold as used in the passage.

87. ACCRETION
(a) Adherence (b) Accumulation
(c) Approval (d)Devaluation (e)Upsurge

88. IMPEDE
(a)Delay (b)Violate (c) defer
(d) taint (e) Diagnose

Directions (89-95): Read the following passage carefully and answer the questions given below it. Certain words have been printed in bold to help you to locate them while answering some of the questions.

Brexit has **evoked** a **spate** of comments. These comments fall into broadly two categories. The first set of comments focusses on the short-term and medium-term impact of Brexit on the U.K., Europe and the rest of the world including India. The second goes into the reasons behind this decision of the British. Globalisation has been interpreted in many ways. In broad terms, globalisation denotes the free movement of goods, services, capital, funds, ideas, technology and people across countries. Many people think globalisation is a recent phenomenon. This is not true. This has been going on for centuries. What has made it unique in recent times is the speed of the movement. Great Britain and many other countries in Europe have reached the present level of economic development only because of this free movement. In both demographic and geographic terms, Britain is a small country. It is not the size of the domestic market that determined its growth. London could not have emerged as the financial centre of the world but for the free flow of capital.

The **gamut** of financial services offered by London is geared to meet world demand and not that of Britain alone. Even after the exit from the EU, Britain cannot remain as an isolated island. It has to be part of an international trade regime which allows for free trade. What then could have motivated a little more than 50 per cent of the population to come out of the EU? It has something to do with the nature of the relationship within the EU. The EU has evolved over the last seven decades. From a loose arrangement, it has become a tight bureaucratic organisation with its jurisdiction extending to multifarious activities. When the euro was created as a common currency, Britain opted out of it. The European Central Bank sets a common monetary policy stance for all member countries. This itself has been a source of irritation to many member countries. This came out prominently at the time of the Greek crisis. With the loss of one instrument of control — namely, the exchange rate variation — the entire burden of adjustment had to be through employment and output changes. As one commentator put it, the EU has moved up its aspiration from the idea of 'common' market to 'single' market. It is this transition which half of Britain has resented. The complex set of regulations **emanating** from Brussels has made at least a section of the British people feel that they have lost 'independence'. Some of the elite of Britain who voted to 'leave' feel this way. They think that control has moved to unelected bureaucrats in Brussels. What has induced the 'non-elite' to vote for Brexit was the EU's migration policy. The free movement of people has been the last straw that broke the camel's back. The low-paid jobs in the U.K. have been taken over by migrants predominantly from Eastern Europe. In an economy which has been growing slowly (even though the U.K. is a better performer than other European countries in recent years), this has come as a shock. The spirit of 'nationalism' still runs high. The poor in Britain feel that they have been cheated by the migrants. Absorbing migrants is not new for Britain. The Asian and African migrants constitute a significant proportion of the population. All this happened when the economy was strong and growing. But this is not the situation now, and the **resentment** is in one sense natural. However, looked at globally, the poor in the countries from which people migrate have benefited. The

British have also gained to the extent that the free movement of people has enabled highly skilled professionals to find positions all over Europe. The 'leave' vote thus was motivated by two considerations: one, the degree of integration that the EU was trying to impose, and two, the migration policy which allowed a free movement of people across countries. Globalisation is not really the devil. If the EU arrangement had been restricted only to free movement of goods, services, capital and funds, it could not have led to any deep resentment. It is the attempt at greater economic integration that has been interpreted as a loss of sovereignty and resented. Globalisation, with its emphasis on efficiency (since goods and services will get produced at the least cost centres), can lead to greater inequality theoretically.

Within a country also, the more efficient including professionals gain disproportionately. This situation gets worse if economies are growing slowly. The U.S. has always prided itself on saying that the system they have is 'people's capitalism'. Inequalities do not matter much when economies are growing strongly and when new entrants to the labour force find employment easily. Countervailing measures are needed to take care of the adverse impact of globalisation. For this reason, we cannot throw the baby out with the bathwater. The developed countries face a serious dilemma. They have reached a stage in their development when further growth will be slow. This will have implications for absorbing the labour that gets added to the market. Complicating the situation is technological development which is increasingly labour-saving. New technologies have a twofold impact. First, they reduce the demand for labour in general. Second, in particular they make unskilled and semi-skilled work redundant. They demand new skills for which retraining may be needed. Distribution of income has thus become an issue which needs to be dealt with directly. Brexit is not a blow against globalisation per se. Labour does not stand in the same category as capital, even though both are factors of production. Migration hurts when the economy is at a low ebb. Britain, along with other developed countries, faces a basic problem of coping with a growth potential which is far lower than the growth rate they had seen before 2008.

89. To what aspect this article is devoted by the author?
(a) Impact of Brexit on U.K and Europe.
(b) Impact of globalization.
(c) Motivation behind the vote against greater economic integration.
(d) The implications of Brexit on the migration in Britain.
(e) Countervailing measures that are needed to take care of the adverse impact of globalisation.

90. What has been the reason for the infuriation of the member countries of European Union?
(a) Technological development which is increasingly labour-saving.
(b) The increase in the EU's propensity towards single market.
(c) Britain's refusal to accept euro as its currency even after common monetary policy stance for all the members.
(d) The migration policy which allowed a free movement of people across countries.
(e) The increase of inequality in economically strong countries which has generated a new nationalism.

91. Which of the following is one of the reasons for major section of British people to vote against European Union?
(a) Low wages due to the abundance of labour force migrating from Asian countries to the Britain.
(b) Slow economic growth and incompetence of the new technologies because of which they are becoming more financially weak.
(c) The jurisdiction enjoyed by the unelected officials in Brussels.
(d) The spirit of nationalism among the some sections of British people.
(e) Discrimination of Britain by other member countries because of both demography and geography.

92. Which of the following statement is false regarding the impact of globalization?
(i) Globalization that stresses on productivity leads to inequality.
(ii) Globalization has been attributed as the primary reason for the loss of supremacy in British people by the author.
*(iii)*Globalization is a major factor which helped London in becoming a financial center of the World.
(a) Only (ii). (b) Both (ii) and (iii).
(c) Only (iii). (d) Both (i) and (ii).
(e) All of these.

93. What is the peril of migration?
(a) Complications in the technological development.
(b) Increase in the inequality in the economies growing at a faster rate like Britain.
(c) Redundant semi-skilled and skilled work in general.
(d) Disbursement of salary is becoming a major issue because of increased number of labour.
(e) None of these.

Directions (94-95): Choose the word/group of words which is **MOST SIMILAR** in meaning to the word/ group of words printed in bold as used in the passage.

94. EVOKED
(a) Aplomb (b) Subdue
(c)Extinguish (d)Elicit (e) Obsolete

95. SPATE

(a) Meristematic (b) Deluge (c) Paradox
(d) Sparse (e) Paucity

(The topic of the Passage asked in the exam was based on the effect of BREXIT in Italian context)

Directions (96-100): In each of the following sentence there are three blank spaces. Below each sentence there are five options and each option consists of three words which can be filled up in the blanks in the sentence to make the sentence grammatically correct.

96. Indian Cricket has seen many _____ captains. But Dhoni was certainly a/an _____ one in many ways. As skipper, he mainly focused on cultivating team spirit and creating _____ for young players.
(a) exceptional, diminutive, chances.
(b) sturdy, serendipitous, chances
(c) stout, robust, opportunity
(d) Stalwart, extraordinary, opportunities.
(e) common, exceptional, prospects.

97. Pakistani's Defense Minister Khwaja Muhammad Asif, for all practical purposes, recently _____ Israel with a _____ nuclear attack, in response to a fake news report that the Israelis had said they would use nuclear _____ against Pakistan if it sent ground troops to Syria.
(a) threatened, retaliatory, weapons
(b) Jeopardized, reciprocating , armor
(c) admonished, riposte , weapon
(d) rebuked , counter , armament
(e) rebuffed, retorted, weapons

98. The line seems to be a direct _____ to the establishment of a caliphate. But those who know the context of Faiz the poet, the man and his work correctly interpret it as a communist vision of life, with the _____ of the _____ prevailing.
(a) commendation, democracy, precariat
(b) invocation, dictatorship , proletariat
(c) intercession, autonomy , rabble
(d) citation, anarchism , bourgeoisie
(e) intervention, despot, common people

99. News and social media companies have a moral _____ to ensure that they do not, directly or otherwise, deliberately _____ the facts to their audiences and pass them off for news. If it is a post-truth world we_____, this becomes especially important.
(a) obligation, distort, desire
(b) commitment, tarnish, denounce
(c) responsibility, misrepresent, inhabit
(d) purport, besmirch ,stigmatize
(e) implication, enhance, reside

100. Activists in the country have long protested its _____ society that essentially _____ women from travelling, marrying or attending college without permission from a male relative, who is called their_____.
(a) benevolent , forbid, steward
(b) Pre- Adamite, prevent, custodian
(c) pre-eminent, restrict, protector
(d) venerable, condemns, manciple.
(e) patriarchal, prohibits, guardian.

101. Five statements are given below, labelled a, b, c, d and e. Among these, four statements are in logical order and form a coherent paragraph. From the given options, choose the option that does not fit into the theme of the paragraph.
(a) This can be seen in the growing importance cities are receiving in the distinct "worlds" of government, business, think tanks, academia and civil society.
(b) After years of ambivalence, urbanization is increasingly being embraced, or at least acknowledged, in India.
(c) Each of these "worlds" is populated by experts in specific "fields" within the urban realm such as planning, environment, transport, housing, finance and health.
(d) sustainability is at the core of the "New Urban Agenda". A substantial portion is dedicated to various "transformative commitments for sustainable urban development"
(e) The multiple "fields" within these parallel "worlds" typically operate as silos and do not interact with the other "fields" and "worlds".

102. Five statements are given below, labelled a, b, c, d and e. Among these, four statements are in logical order and form a coherent paragraph. From the given options, choose the option that does not fit into the theme of the paragraph.
(a) It is often said that the urgent and the immediate are not the same as important.
(b) Therefore, one should not be surprised that the Indian corporate sector has kept its calls for lower interest rates and a competitive exchange rate on an auto-replay mode.
(c) Indeed, they are in conflict with one another.
(d) All the urgent and the immediate commentary on the decision by the newly constituted monetary policy committee (MPC) of the Reserve Bank of India (RBI) has already come out.
(e) RBI has released the minutes of the MPC meeting too. The bulk of it has been seen earlier in the press release that followed the meeting

103. Five statements are given below, labelled a, b, c, d and e. Among these, four statements are in logical order and form a coherent paragraph. From the given options, choose the option that does not fit into the theme of the paragraph.

(a) Notwithstanding the good monsoon this year after back-to-back drought years, most commentators agree that the rural economy and the agricultural sector may not be out of distress.

(b) Recent attempts by Rahul Gandhi to mobilize farmers during his Kisan Yatra might not revive the fortunes of the Congress party in Uttar Pradesh, but they did contribute to bringing the issues of farmers and agriculture to the political mainstream.

(c) It is also worth mentioning that most of them were seen as leaders of dominant farming communities or caste groups that benefited from rising profitability and price support.

(d) Given that almost half of the total workers in the country are still engaged in farming and the majority of households in rural areas are still dependent on agriculture, directly or indirectly, issues confronting the farming community are naturally an important electoral plank.

(e) More so in an environment where rural areas, and the agricultural sector in particular, have been in some distress in recent years.

104. Five statements are given below, labelled a, b, c, d and e. Among these, four statements are in logical order and form a coherent paragraph. From the given options, choose the option that does not fit into the theme of the paragraph.

(a) Dyn is a part of the backbone of the Internet, since it is one of the companies that provides domain name services or DNS to Internet users, and translates simple English-based commands like "livemint.com" typed into a browser into the actual numeric addresses that the Internet's computers use to identify each website.

(b) Security firm Flashpoint has said that it believes that seemingly innocuous items such as video recorders, webcams, closed-circuit security cameras and the like were taken over by malware, and then, without their owners' knowledge, were used to help execute the massive cyber attack

(c) This outage was astonishing in its ferocity, especially since it co-opted the much vaunted Internet of Things (IoT) into the attack.

(d) It claims that hundreds of thousands of such devices were co-opted into the attack by being infected with malware.

(e) This malware, called Mirai, was released by an anonymous hacker named Anna-senpai some weeks ago.

105. Five statements are given below, labelled a, b, c, d and e. Among these, four statements are in logical order and form a coherent paragraph. From the given options, choose the option that does not fit into the theme of the paragraph.

(a) The mathematician Richard K. Guy is arguably best known for discovering a glider.Assuming that's an intriguing-enough opening, let me explain. In 1970, the British mathematician John Conway invented a board game called, simply, "Life".

(b) Life happens on a grid of squares that stretch in every direction (imagine an infinite chessboard). Each square, or cell, is either alive or dead (or call it black or white, filled or empty).

(c) Now, this is not a game in the conventional sense: there's no way to "win", nor do you play against an opponent. In fact, Life doesn't even need a player as it proceeds. You just set up an initial state and then watch what happens.

(d) To start, you choose a certain number of cells to be live—at random, or in a pattern, whatever. Each cell now evolves according to a set of rules that considers its eight neighbours (left, right, above, below, and on the four corners).

(e) This is the endlessly fascinating question Conway's game raises, and this is why it was and remains today a much discussed favourite among mathematicians and computer scientists.

Directions (106-109): In each of the following sentences four options are given. You are needed to identify the best way of writing the sentence in context of the correct usage of standard written English.

106. The entire cast and crew of the film, enjoyed splashing in the pool, bathing in the ocean, and, particularly, to sun bathe on the shore.

(a) The entire cast and crew of the film, enjoyed splashing in the pool, bathing in the ocean, particularly to sun bathing on the shore.

(b) The entire cast and crew of the film, enjoyed splashing in the pool, to have a bath in the ocean, and, particularly, to sun bathe on the shore.

(c) The entire cast and crew of the film, enjoyed swimming in the pool to bathe in the ocean, and, particularly sun bathing on the shore.

(d) The entire cast and crew of the film, enjoyed swimming in the pool, bathing in the ocean, and, particularly, sun bathing on the shore.

(e) No error.

107. No officer had ought to be put into a situation where he was to choose between his love for his family and the responsibilities accompanying his duty.
(a) No officer would be put in a situation where he have to choose between his love for family and the responsibilities accompanying his duty.
(b) No officer had ought to be put into a situation in which he has to choose between his love for his family and the responsibilities accompanying his duty.
(c) No officer should be put into a situation where he has to choose between his love for his family and the responsibilities accompanying his duty.
(d) No officer ought to be put into a situation in which he has to choose between his love for this family and the responsibilities accompanying his duty.
(e) No error.

108. Being a realist, the detective could not accept the statement of the accused that UFOs had caused the disturbance.
(a) Being a realist that he was, the detective could not accept the statement of the accused that UFOs had caused the disturbance.
(a) Since he was a realist, the detective could not accept the statement of the accused that UFOs had caused the disturbance.
(c) Being that he was a realist, the detective could not accept the statement of the accused that UFOs had caused the disturbance.
(d) Realist that he was, the detective could not accept the statement of the accused that UFOs had caused the disturbance.
(e) No error

109. If we cooperate together by dividing up the booty, we shall be able to work together smoothly in the future.
(a) If we cooperate with one other by dividing up the booty, we will be able to work smoothly together in future.
(b) If we cooperate by dividing up the booty, we shall be able to work together smoothly in the future.
(c) If we cooperate by dividing up the booty together, we shall be able to work together smoothly in the future.
(d) If we cooperate with each other by dividing the booty, we shall be able to work together smoothly in the future.
(e) No error.

Directions (110–114): Which of the words/phrases (a), (b), (c) and (d) given below should replace the words/phrases given in bold in the following sentences to make it meaningful and grammatically correct. If the sentence is correct as it is and 'No correction is required', mark (e) as the answer.

110. A very stout, ridged, hairy stem, the **petioled** leaves **compounded** of three broadly ovate, lobed and saw-edged divisions, downy on the underside, and the great **umbels**, which sometimes measure a foot across, all **bear out** the general impression of a Hercules of the fields.
(a)bracken, comprised, flower, bear out
(b)stemmed, composited, cluster, borne off
(c)axis, consist, species, bore
(d)rooted, embraced, flora, bear
(e)No error

111. The judge **charged him** with a **penalty** rather than a prison sentence **yet** it was his first **misdemeanour**.
(a) indicted him, penance, as, mistake
(b) freed him, sanctions, because , fault
(c) vindicated him off, penalty, even though, wrongdoing
(d) let him off, fine, since, offence.
(e) None of these

112. Following the **footsteps** of many of his predecessors, he promptly **accorded** his election "capitulation" as a/ an **infraction** on the divinely **granted** prerogatives of the Holy Sea.
(a) pavement, adhered, dereliction, bequeath
(b)ideals, abjured, preservation, conferred
(c) example, repudiated , infringement, bestowed
(d)specimen, forbeared, contravention, entrusted
(e) None of these

113. "We **perceive** data science and data engineering **looming** as job roles this year. **In harmony with** the current trend, technical roles such as software developer and non-technical role such as digital marketing took top two spots as the most popular job **wholes**," Aspiring Minds Co-Founder and CEO Himanshu Aggarwal said.
(a) notice, receding, In step with, levels
(b) recognize, dawning , In compliance with, searches
(c) cloak, appearing, In accordance with, types
(d) see, emerging, In line with, categories
(e) None of these

114. The EU **inquired** to the crisis by implementing a series of financial **relief** mechanisms, such as the European Financial Stability Fund and the European Stability Mechanism, to **furnish** emergency loans to those countries most affected by **advancing** interest rates.
(a) reacted, sustain, divest, mounting
(b) responded, support, provide, skyrocketing
(c) rebutted, aid, deliver, plummeting, escalating
(d) excavated, support, disburse, spiraling
(e) None of these

Directions (115–116): Sentences given in each question, when properly sequenced form a coherent paragraph. Each sentence is labeled with a letter. Choose the most logical order of sentences amongst the five choices given to construct a paragraph.

115. (A) The newspaper man, the flower seller, the milkman, the sweeper, they are all privy to the chatting and sharing of news that the elderly find comforting.
(B) When we remove them from their homes, it is not only the family that they are being removed from, but all those other people that they see every day and whose joys and woes become their own.
(C) In our system of living, the elderly at home have a circle of acquaintances, and friends.
(D) The loneliness of the discarded elderly is manifold.
(E) When we forcibly remove people from surroundings they have been part of for decades we put an un-mendable tear in the fabric of their lives.
(a) DECAB (b) ABDCE (c) ECADB
(d) DBAEC (e) CBAED

116. (A) Some of the worst cancers aren't detected by screening.
(B) The only way to be sure is to look at the results of randomized trials comparing cancer deaths in screened and unscreened people.
(C) So how can we be confident that getting a screening test regularly is a good idea?
(D) Even when screening "works" in such trials, the size of the benefit observed is surprisingly low: Generally, regular screening reduces fatalities from various cancers between 15 percent and 25 percent.
(E) They appear suddenly, between regular screenings, and are difficult to treat because they are so aggressive.
(a) DBAEC (b) AECBD (c) ADBEC
(d) ACBED (e) ACBDE

Directions (117–120): Read each of the following four sentences to find out whether there is any grammatical mistake/error in it. Choose the sentence with no grammatical error as the correct answer. If all of the given sentences are grammatically incorrect, mark (e) as an answer.

117. (a) John Wanamaker, founder of the stores that bear his name, once confessed, I learnt 30 year ago that it is foolish to scold.
(b) Whether rich or poor, American or Indian, we all have the same emotions deep with us.
(c) This research indicate that we can no longer avoid significant warning during this century.
(d) Every modern society depends on the trust in the skills and ethics of a variety of institutions such as schools and colleges, hospital and markets.
(e) None of these

118. (a) Many of us have learnt not to make a public display of our emotions, particularly when they are negative.
(b) Though Indians have been increasingly taking up corner office in the international companies, Rahul is the first Indian to lead one of the top four accounting firms globally.
(c) Democracy was suspended not because it came under existential threat but because it has become an obstacle to political ambitions trotted out as the nation's solution.
(d) A virtual takeover of a bankrupt civil society by a coterie of individuals whom cornered tremendous power by being able to represent the state.
(e) None of these

119. (a) India has decided do away with the practice of put each imported food consignment through lab checks and switch to the international norm of random and risk based inspections.
(b) SP Sumit singh , along with Devesh Panday and DSP Hasan, headed separate terms that include cops from six police stations and investigators from the district police crime cell.
(c) Our emission standards are one-tenth that of global averages and far more stringent than even Europe.
(d) The university has received about 500 applicants for the course, out of them 50 will be shortlisted for the programme.
(e) None of these

120. (a) The Reserve bank of India lifted the ban upon imports of gold coins and medallions by banks and trading houses.
(b) President Pranab Mukherjee inaugurated Indian international trade fair 2016 in Pragati maiden in new Delhi.
(c) Three Indian, two women and one man were among the shortlisted 100 applicants whom were chosen for one-way trip to mars under one mission.
(d) Fasting not only deoxifies the system but also gives a person training in endurance, a spirit of acceptance and self control.
(e) None of these

Solutions

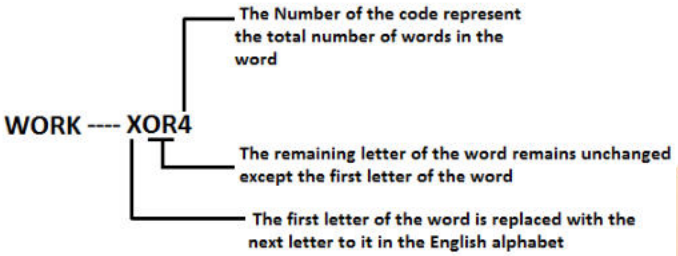
REASONING ABILITY

Direction (1-4): These coding decoding questions are based on the latest pattern. Following logic is applied to decode the code.

(i) The first Letter in the code represents the next letter of the first letter of the word (A-B, E-F, I-J, L-M, F-G… etc.).

(ii) The number at the end of the code represent the total number of letters in the word.

(iii) The remaining letter in the word are written down as it is without changing their position.



1. (c); None5 Mas4 Farnin7 Xa3

2. (c); Hoo4 Qerfec7 Blway6 Qeopl6

3. (e); Blway6 Ienc5 Ianc5 Xron5

4. (b); Garmin7

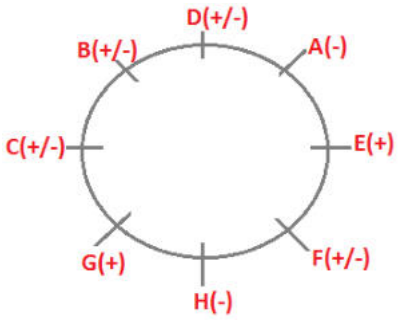
Direction (5-10):

Unit	Total Height	Country	Height of books + height of Boxes
5	55"ft	Sydney	28"ft +27"ft
4	37"ft	Paris	20"ft +17"ft
3	32"ft	Beijing	16"ft +16"ft
2	53"ft	London	30"ft +23"ft
1	75"ft	Zurich	35"ft +40"ft

5. (c); 6. (d); 7. (e);

8. (d); 9. (b); 10. (b);

Direction (11-15):

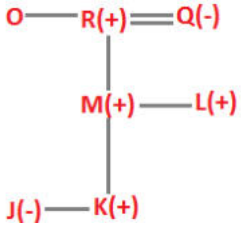


11. (d); 12. (b); 13. (c);

14. (a); 15. (d);

16. (b); Even after using all the statements, we can only say that the tallest will be either F or B but we cannot definitely say that who is the tallest.

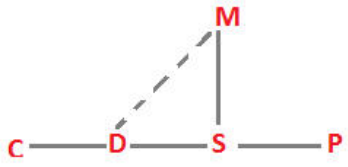
17. (e); Using statement I and III we get our blood relation tree in which M is the nephew of O.



18. (e); Using statement I and III we get our final answer that 'V' is the tallest among all of them.

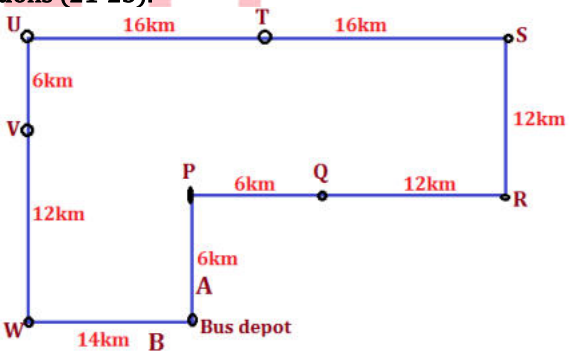
V> T> U> X> W> S

19. (a); From Statement II and III we get our final answer in which point D is in the southwest direction with respect to point M.



20. (c); How can the strategy to curb molestation of woman be effective if the responsibility to carry out the strategy is on the shoulders of those cops who have been accused of heinous charges against women.so option (c) is the correct option.

Directions (21-25):

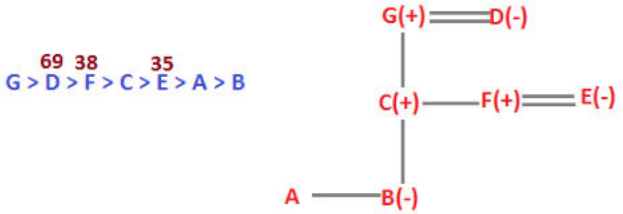


21. (b); 22. (d); 23. (a);

24. (c); 25. (d);

26. (a); The question was put to people who were coming out of the terminal about the services aboard the flight. If it was shown that a majority of people coming out of the terminal were not passengers, Then the conclusion would really be jeopardized. (a) does just that.

Direction (27-32):



27. (c); 28. (d); 29. (b);

30. (e); 31. (c); 32. (e);

33. (e); Only I follows. What is being told is genuine. On learning this, the blood donors will get attracted by the win-win proposition, thus simultaneously meeting the blood requirement to a large extent. Statement II is not a practical course of action. Statement III is not an immediate course of action as blood banks can be created only after the sufficient blood donors are available.

34. (a); Because of the statement (B), government has decided to roll back the hike in the prices of cooking gas and kerosene.

35. (b); As he found cockroaches in the crevices, he immediately drew the attention of the catering manager. So statement (B) is the effect of statement (A).

Direction (36-40):

Year	Person
1969	C
1972	B
1978	H
1981	A
1989	F
1997	E
2000	G
2005	D

36. (b); 37. (d); 38. (b);

39. (e); 40. (c);

QUANTITATIVE APTITUDE

41. (b); Required Ratio $= \frac{200+280}{380+420} = \frac{480}{800} = \frac{3}{5}$

42. (b); Number of defective products
$= \frac{20}{100}(160 + 480)$
$= \frac{20}{100}(640) \Rightarrow = 128$

43. (a); Required percent $= \frac{180}{300} \times 100 = 60\%$

44. (b); Required percent $= \frac{560-480}{480} \times 100$
$= \frac{80}{480} \times 100$
$= \frac{100}{6}\% \Rightarrow = \frac{50}{3}\%$
$= 16\frac{2}{3}\%$

45. (d); Difference $= (480 + 200 + 520) - (160 + 280 + 380)$
$= 1200 - 820 \Rightarrow = 380$

46. (e); Required ratio $= \frac{45\times40}{60\times30} \times \frac{2}{1} = \frac{2}{1}$

47. (a); Let the total number of population of village B be x
$x \times \frac{60}{100} \times \frac{10}{100} \times \frac{1}{2} = 300 \Rightarrow x = 10000$

48. (e); Number of people having Bank Account in village C $= 0.6x$
Number of people having Bank account in village D $= 0.55 \times 2x = 1.1x$
Required percentage $= \frac{1.1x-0.6x}{1.1x} \times 100$
$= \frac{0.5}{1.1} \times 100 \Rightarrow = 45.45\%$

49. (d); Required Percentage
$= \frac{1\times0.45+2\times0.6+3\times0.6}{1+2+3} \times 100$
$= \frac{3.45}{6} \times 100 = 57.5\%$

50. (b); Required percentage $= \frac{60-40}{40} \times 100 = 50\%$

51. (d); A: $3T = 7C$
B: $T - C = 900$
C: $T = C + C \times \frac{400}{3\times100} = \frac{7C}{3}$

52. (e); A → Amount = 9331.2, time = 2 year
B → difference between CI and SI = 51.2 for two years
C → P→ 8000
From A & B
$P(1 + \frac{r}{100})^2 = 9331.20$.....(i)
$P(\frac{r}{100})^2 = 51.20$.....(ii)
Dividing (i)and (ii)
r=8%
From B & C
$51.2 = \frac{8000 \times R^2}{100^2}$
From A and C
$8000(1 + \frac{r}{100})^2 = 9331.20$
r=8%

53. (d); (A)

	Q	P
efficiency	1.6	1
time	1	1.6

$1.6t = 8$
$t = 5\ days$
time taken by Q is 5 days
(B)
$\frac{1}{p+q} = \frac{1}{p} + \frac{1}{q}$

$\frac{13}{40}=\frac{1}{8}+\frac{1}{q}$
$\frac{1}{q}=\frac{13-5}{40}=\frac{1}{5}$
$q=5$ days
(C)

	P	Q
efficiency	$\frac{125}{2}$	100
time	8	5

Time taken by Q is 5 days

54. (e); from A, B & C
Non-voting population of a certain country
$=\frac{70}{100}\times 30$ milion
$=21$ milion

55. (b); Profit = 300
A→ CP = 1200 – 300 = 900
% profit= $\frac{300}{900}\times 100=33\frac{1}{3}\%$
B → 25% → 400
1% → 16
100% → 1600
CP = 1200 – 300 = 900
% profit = $\frac{300}{900}\times 100=33\frac{1}{3}\%$
C → % profit = $\frac{300}{900}\times 100=33\frac{1}{3}\%$

56. (a); $x=\ \pm 12$
$y=12,12$
$\therefore x\le y$

57. (a); $x=2,\frac{5}{2}$
$y=4,\frac{5}{2}$
$\therefore x\le y$

58. (a); x = 7, 8 y = 5, 1
x > y.

59. (c); x=$\frac{102}{200}$
x=0.51
y=$\frac{200}{160}$ ⇒ y=1.25
y>x

60. (c); x = 183
y = 200
$x < y$.

61. (c); Let pipes A and B takes t minutes together.
A will take $(t+3)$ minutes to fill the tank
B will tank $\left(t+\frac{64}{3}\right)$ minutes to fill the tank
$\frac{1}{t+3}+\frac{3}{3t+64}=\frac{1}{t}$
$\frac{3t+64+3t+9}{(t+3)(3t+64)}=\frac{1}{t}$
$6t^2+73t=3t^2+64t+9t+192$
$3t^2-192=0$
$(t^2-64)=0$
$t=8$ minutes

62. (d); Marks of T = 75
Marks of R = 65
Marks of Q = 110
Marks of P = 85
Marks of U = 120
Maximum marks = 200
Required percentage =$\frac{120}{200}\times 100=60\%$

63. (d); Let the largest and smallest angles be 3x and x. Now
x + 3x + 56 = 180
x = 31
largest angle = 93°.

64. (a); Let the odd numbers be x, x + 2, x + 4, x + 6 and the even numbers be y, y + 2, y + 4.
Now (4x + 12) – (3y + 6) = 20
And (y + 4) – (x + 6) = 5
Solving them, we get x = 35 and y = 42
Required sum = 35 + 42 = 77

65. (b); Let initial CP of book is x.
CP to Shishir=$\frac{120}{100}\times\frac{125}{100}\times\frac{90}{100}x=1.35x$
Required percentage decrease=$\frac{1.35x-x}{1.35x}\times 100$
$=25.92\%$

66. (d); 5%$SP\rightarrow 14$
$SP\rightarrow 280$
$1.4CP=280\ \Rightarrow$ CP=200
New SP=$\frac{80}{100}\times 280=224$
Profit=224-200=24

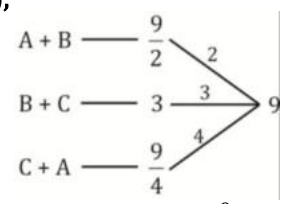
67. (b); $P_1(1+\frac{10}{100})^2=P_2(1+\frac{10}{100})^3$
$\frac{P_1}{P_2}=\frac{11}{10}$
$P_2=\frac{10}{21}\times 10500=5000$

68. (a); Total amount $=9000\left(\frac{8\times 2}{100}+\frac{9.5\times 4}{100}+\frac{11\times 2}{100}+\frac{12\times 4}{100}\right)+9000=11160+9000=20160$

69. (a); Ratio of investment
A : B : C
(8000×12) : (12000×4)+(16000×8) : (16000×9)+(12000×3)
24 : 44 : 45
Share of A = $\frac{24}{113}\times 22600=$ Rs. 4800

70. (a); Let speed of the trains be x, y km/h
ATQ,
$\frac{92}{x+y}=4, x+y=23$
Also,
$x-y=7$
$x=15\ kmph\ \Rightarrow\ y=8$ kmph

71. (b);



Total efficiency = $\frac{9}{2}$
Time = 2 hours

72. (a); At the three years amount will be $= 15000 + \frac{15000\times3\times8}{100}$
$= 18600$ Rs.
Now, after three years C.I. annually
So amount $= 18600\left(1+\frac{10}{100}\right)^2$
$= 22506$ Rs.

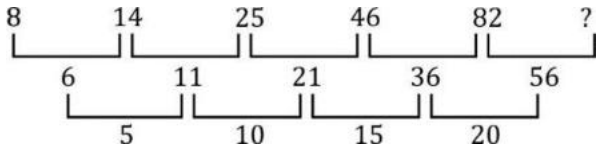
73. (e); AB $= 60$ km
Ram's speed $= x$ kmph
Syham's speed $= y$ kmph $\frac{60}{x}-\frac{60}{y}$
$= 1$ .....(i)
$\frac{60}{y}-\frac{60}{2x}=\frac{1}{2}$ .....(ii)
From (i) and (ii)
$x = 20$ kmph

74. (d); Let initially Cask holds V litres of wine
$\frac{Amount\ of\ wine\ left}{Initial\ Amount\ of\ wine}=\left(1-\frac{6}{V}\right)^2$
$\frac{121}{121+23}=\left(1-\frac{6}{V}\right)^2$
$\frac{121}{144}=\left(1-\frac{6}{V}\right)^2$
$\frac{11}{12}=1-\frac{6}{V}$
$\frac{6}{V}=\frac{1}{12}$
$V = 72$ litres

75. (c); Distance travelled by passenger train in
$(9-4) = 5$ hours
$= 5\times30 = 150$ km
time required to cross the passenger train by mail train $= \frac{150}{(45-30)} = 10$ hour
so second train will overtake the first, 10 hours after the second train starts

76. (e); $\times 0.5+1,\ \times 1-1,\ \times 1.5+1,\ \times 2-1,\ \times 2.5+1$
$22\times2.5+1 = 56$

77. (c);



$82 + 56 = 138$

78. (d); $\times 1+1,\ \times 2+2,\ \times 3+3,\ \times 4+4,\ \times 5+5$
$93\times4+4 = 372+4 = 376$

79. (c); $\times3+1, \times3+2, \times3+3$...
$\therefore\ 477\times3+4 = 1431+4 = 1435$

80. (d); $\times7+1, \times6+2, \times5+3, \times4+4, \times3+5$....
$\therefore\ 22\times6+2 = 134$

ENGLISH LANGUAGE

81. (c); 'The recovery from the crisis of 2008 was tepid' suggests that (a) is not the correct option. Passage is silent about any sort of verdict hence (b) is also not the correct option. No governmental barriers have been described in the passage. Hence, (d) is also not the answer.
In the fifth paragraph it is given that 'there were severe supply bottlenecks '.....Agricultural production fell sharply in 2009-10 because of a severe drought……'. Hence, (c) is the correct option.

82. (d); In the second last paragraph, it is given that '……"ease of doing business" …… (i.e.) bureaucratic hurdles which impede speedy execution of projects need to be removed….' Hence, (d) is the correct option.
Red tapism: It refers to excessive regulation or rigid conformity to formal rules that is considered redundant or bureaucratic and hinders or prevents action or decision-making.
Bureaucracy: A system of government in which most of the important decisions are taken by state officials rather than by elected representatives.

83. (d); According to author, the incremental capital output ratio depends on current account deficit (and not fiscal deficit). Hence (d) is the correct option.
NOTE: Fiscal deficit is when a country spends more on government spending than it takes in taxes and borrowing. Definition of 'Current Account Deficit Occurs when a country's total imports of goods, services and transfers is greater than the country's total export of goods, services and transfers.

84. (c); It is given in the passage that 'the growth rate achieved in the high phase period of 2005-06 to 2007-08 was robust.' hence we can't infer the same about the whole decade. Besides this, the mentioning of depression of 2008 also suggests that (c) is the correct option.

85. (e); It is given in the last paragraph of the passage that 'The Indian economy in the recent past has shown …….high growth is very much in the realm of possibility' from which we can infer that it is the past performance of the Indian economy on the basis of which the given conclusion has been made. No option suggests this. Hence, (e) is the correct option.

86. (d); Clearly 'Can India grow fast: An introspection' is the apt title for the given passage.

87. (b); 'Accretion' means 'increase by the gradual accumulation of additional layers or matter'. Hence 'Accumulation' is the word which is most similar in meaning to it.

88. (a); 'Impede' means 'delay or prevent (someone or something) by obstructing them'. Hence 'Delay' is the word which is most similar in meaning to it.

89. (c); Throughout the passage the author has tried to explain the actual reason behind the vote against EU.

90. (b); Refer to the 2nd paragraph of the passage, '' European Central Bank sets a common monetary policy stance for all member countries'' and in the answer single market is mentioned which is the same thing and hence is the common source of irritation for member countries.

91. (c); Refer to the 2nd paragraph of the passage, '' They think that control has moved to unelected bureaucrats in Brussels." which is why some section atleast voted against EU.

92. (a); Option (ii) is incorrect as author thinks it is the arrangement that is the real devil and not the globalization.

93. (e); None of the options mentioned above are correct.

94. (d); evoked means bring or recall (a feeling, memory, or image) to the conscious mind hence elicit is the word most similar in meaning.

95. (b); Spate means a large number of similar things coming in quick succession hence deluge is the word most similar in meaning.

96. (d); "Stalwart, extraordinary, opportunities" is the correct choice.
Stalwart means loyal, reliable, and hard-working.

97. (a); "threatened, retaliatory, weapons" is the correct choice.
"**Retaliatory** means the action of returning a military attack; counter-attack."

98. (b); **Invocation** means the action of invoking someone or something.
Proletariat means working-class people regarded collectively (often used with reference to Marxism).

99. (c); "responsibility, misrepresent, inhabit" fits the blanks most appropriately.

100. (e); patriarchal means relating to or denoting a system of society or government controlled by men.
Prohibits means formally forbid (something) by law, rule, or other authority.

101. (d); Only option (d) is not a part of the coherent paragraph as other options form an opening to an article the option (d) talks about the sustainability of "New Urban Agenda" which is not yet mentioned.

102. (b); Only option (b) is not a part of the coherent paragraph as the reason for the call made by the Indian corporate sector for lower interest rates and a competitive exchange rate on an auto-replay mode is not given and thus is redundant in this paragraph and does not fit into the theme of the paragraph.

103. (c); Option (c) is the one that doesn't fit the theme of the paragraph properly as from the other options it can be concluded that paragraph is an introductory part of the article while option (c) is not the part of this paragraph, it can be indicated by 'most of them' as we don't know anything about them.

104. (a); Option (a) is the one which is not a part of the coherent paragraph as we can see the other options are talking about the effects and the shock that is caused by the malware option (a) is just defining a term Dyn hence is the correct choice.

105. (e); Option (e) is correct as it does not fit into the theme of the paragraph.

106. (d); Parallel structure requires the use of the verbal noun as the object of the verb enjoyed: Enjoyed what? Splashing, bathing: and sun bathing, enjoy should not be followed by an infinitive construction.

107. (c); This is the most correct and concise form of the sentence.

108. (e); There is no error in the original sentence.

109. (d); Both together and up are unnecessary since their meaning is included in the words cooperate and divide.

110. (e); There is no error in the given sentence.
Bear out - to support or confirm a story or explanation
petioled - the stalk that joins a leaf to a stem.
Compounded- make up (a composite whole); constitute.
Umbels- a flower cluster in which stalks of nearly equal length spring from a common centre and form a flat or curved surface, characteristic of the parsley family.

111. (d); Option (d) is the correct choice.
Let off is a **phrasal verb** which means to allow (someone who has been caught doing something wrong or illegal) to go without being punished.
Fine- a sum of money exacted as a penalty by a court of law or other authority.
Since - for the reason that; because.
Offence - a breach of a law or rule; an illegal act

112. (c); Option (c) is the correct choice.
bestowed means confer or present (an honour, right, or gift).
repudiated means refuse to accept; reject.
infringement means the action of breaking the terms of a law, agreement, etc.; violation.

113. (d); Option (d) is correct.
see- experience or witness (an event or situation).
emerging- become apparent or prominent.
In line with- in alignment or accordance with.
Categories- a class or division of people or things regarded as having particular shared characteristics.

114. (b); Option (b) is correct choice.
responded- do something as a reaction to someone or something.
support- give assistance to, especially financially.
provide- make available for use, supply.
skyrocketing- increase very steeply or rapidly.

115. (a); 116. (b); 117. (d);
118. (a); 119. (c);120. (d);

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Part-VII

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REASONING ABILITY

Direction (1-5): Study the following information carefully and answer the questions given below:

Nine persons i.e. P, Q, R, S, T, U, V, W, X were born on different months i.e. January, March, April, May, July, August, September, October, November but not necessarily in same order.

Four persons were born between P and T. P was born before T. Q was born in the month of 30 days after July. T was born after Q and before R. There were as many persons born before X as after R. one person was born between U and V. S was born before U and after W.

1. How many persons were born between X and V?
(a) Two (b) Three (c) One
(d) Four (e) More than four

2. Who among the following was born on August?
(a) R (b) S (c) T
(d) P (e) None of these

3. In which of the following month S was born?
(a) March (b) April (c) June
(d) October (e) None of these

4. If W is related to April, V is related to July then, P is related to which of the following?
(a) March (b) May (c) June
(d) August (e) October

5. Four of the following five are alike in certain way based from a group, find the one which does not belong to that group?
(a) R (b) S (c) T
(d) U (e) V

Direction (6-10): In each of the questions below are given some statements followed by two conclusions. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.
(a) If only conclusion I follows.
(b) If only conclusion II follows.
(c) If either conclusion I or II follows.
(d) If neither conclusion I nor II follows.
(e) If both conclusions I and II follow.

6. **Statements:** Only a few Palace is Home. All Home is Office. No Office is Building.
Conclusion
I: All Palace is Home is a possibility.
II: Some Palace is Building.

7. **Statements:** All Men is Women. Some Child is Women. No Men is Boy.
Conclusion
I: Some Men is Child.
II: No Men is Child.

8. **Statements:** No Professor is Student. Only a few Student is Lecturer. All Lecturer is Principal.
Conclusion
I: All Professor is Principal is a possibility.
II: All Student is Lecturer is a possibility.

9. **Statements:** Only a few Palace is Home. All Home is Office. No Office is Building.
Conclusion
I: Some Home is Building.
II: No Home is Building.

10. **Statements:** No Professor is Student. Only a few Student is Lecturer. All Lecturer is Principal.
Conclusion
I: Some Student is Principal.
II: Some Lecturer is Professor.

Direction (11-15): Study the following information carefully and answer the questions given below:

Eight persons are sitting around a square table. Four persons are sitting at middle of the sides of the square and all are facing towards inside. Remaining four are sitting at corners and they face outside.

Two persons are sitting between P and U. R who is an immediate neighbor of P, sits opposite to S. T sits 3rd to the right of V. W sits immediate right of T. Q faces W.

11. Who among the following sits opposite to T?
(a) P (b) R (c) S
(d) W (e) None of these

12. How many persons are sitting between P and V when counted from left of P?
(a) Two (b) Three (c) Four
(d) Either (a) or (c) (e) None of these

13. What is the position of Q with respect to R?
(a) Immediate right
(b) Immediate left
(c) 2nd to the right
(d) 2nd to the left
(e) None of these

14. Who among the following person sit 3rd to the right of Q?
(a) P (b) U (c) R
(d) S (e) None of these

15. Four of the following five are alike in certain way based from a group, find the one which does not belong to that group?
(a) Q (b) R (c) S
(d) T (e) U

Direction (16-17): Study the following information carefully and answer the questions given below:

Eight members are living in a family. Q is the only son of P. T is wife of U. T is sister of Q and R. V is daughter in law of W. S is son of T. W is the mother of Q.

16. How is S related to R?
(a) Son (b) Daughter (c) Nephew
(d) Niece (e) Can't be determined

17. How many male members are in the family?
(a) Four (b) Five (c) Three
(d) Six (e) None of these

18. How many such numerals are there in the number '254136987' which will remain at the Same position when arranged in ascending order from left to right?
(a) one (b) two (c) three
(d) four (e) None of these

19. How many pairs of letters are there in the word 'EDUCATION', each of which have as many letters between then in the word as they have between them in the English alphabet?
(a) one (b) two (c) three
(d) four (e) more than four

20. If four letter word is formed from 1st, 3rd, 5th and 6th letter of TRANSLATE then what is the 3rd letter of newly formed word? If more than one meaningful word is formed, then the answer will be Z.
(a) L (b) T (c) A
(d) S (e) Z

Directions (21-25): Read the following information carefully and answer the questions given below:

Twelve people are sitting in two parallel rows containing six people each in such a way that there is an equal distance between adjacent persons. In row 1 – P, Q, R, S, T and U are seated (but not necessarily in the same order) and all of them are facing south. In row 2 – A, B, C, D, E and F are seated (but not necessarily in the same order) and all of them are facing North. Therefore, in the given seating arrangement each member seated in a row faces another member of the other row. P faces D. U does not face A, who sits left to E but not immediate left. R sit at one of the ends and diagonally opposite to B. Three persons sit between B and F, who does not face U. C sits immediate left to D but does not faces S. Two persons sit between Q and U, none of them sits at the end. The one who faces T sits 2nd right to A.

21. Who among the following faces A?
(a) S (b) T (c) Q
(d) R (e) none of these

22. How many persons sit to the right of R?
(a) No One (b) one (c) two
(d) three (e) four

23. Four of the following five form a group ,who among the following does not belongs to that group?
(a) U (b) T (c) E
(d) F (e) A

24. If in a certain way R is related to C, T is related to E, then who among the following is related to D?
(a) U (b) T (c) E
(d) F (e) Q

25. Who among the following sit 3rd right to U?
(a) R (b) T (c) P
(d) S (e) Q

Directions (26-30): Study the following information carefully and answer the questions given below:
In a certain code language
'left right centre' is written as 'yo vo na',
'ahead below behind' is written as 'sa ra la',
'above centre right' is written as 'ha vo na', and
'behind below above' is written as 'ha ra la'.

26. What is the code for 'left'?
(a) sa (b) ha (c) yo
(d) na (e) None of these

27. 'behind' will be written as?
(a) ra (b) ha (c) la
(d) Either (a) or (c) (e) None of these

28. What is the code for 'ahead'?
(a) sa (b) yo (c) la
(d) ha (e) Can't be determined

29. What does 'ha' stand for?
(a) behind (b) below (c) ahead
(d) above (e) None of these

30. What is the code for 'centre'?
(a) la (b) yo (c) sa
(d) ha (e)Can't be determined

Directions (31-35): Study the following information and answer the questions given below:

There are eleven boxes placed one above the other. Five boxes are placed between F and T. Not more than five boxes are kept above T. Two boxes are kept between T and M. Three boxes are kept between M and S and M is kept at one of the positions above S. There are only three boxes kept above the box J. One box is kept between R and S. Two boxes are kept between R and H. Box D is kept at one of the positions below box K and at one of the positions above box C which is not above R. Box E is kept immediately above K.

31. How many boxes are placed between J and R?
(a) 5 (b) 6 (c) 3
(d) 4 (e) None of these

32. Which of the following statement is true regarding C?
(a) C is placed at one of the positions above D
(b) C is placed immediately below F.
(c) R is placed just above C
(d) C is placed at the bottom most position
(e) None of these

33. Which of the following is not true regarding J?
(a) J is immediately below box T
(b) One of the boxes below J is D
(c) Number of boxes between J and S is four
(d) One of the boxes above J is K
(e) One box is kept between J and M

34. Number of boxes above K is one less than the number of boxes below _____?
(a) S (b) R (c) F
(d) D (e) None of these

35. How many boxes are there between M and H?
(a) One (b) Two (c) Three
(d) None (e) More than three

Directions (36-40): In each of the question, relationships between some elements are shown in the statements. These statements are followed by conclusions numbered I and II. Read the statements and give the answer.
(a) If only conclusion I follows.
(b) If only conclusion II follows.
(c) If either conclusion I or II follows.
(d) If neither conclusion I nor II follows.
(e) If both conclusions I and II follow.

36. **Statements:** $C \le L = E \le R \le K = P \ge O$
Conclusions: **I.** $P = C$ **II.** $C < P$

37. **Statements:** $W > A = S \ge H < I \le N \le G$
Conclusions: **I.** $H < W$ **II.** $G > H$

38. **Statements:** $C < O \le D = S > A \ge P \ge Q$
Conclusions: **I.** $Q < D$ **II.** $C < A$

39. **Statements:** $F \le B = I \le C = A \ge S > E$
Conclusions: **I.** $S \ge B$ **II.** $F > E$

40. **Statements:** $I \ge N = T \ge E > L \ge G > M$
Conclusions: **I.** $G < N$ **II.** $I \ge L$

Quantitative Aptitude

Directions (41-45): Study the table given below and answer the following Question

Company	Total employee	Employee in HR dept	% of Female in HR dept
A	300	80	75
B	250	50	80
C	400	100	60
D	200	60	60

41. Find the average no. of Females in HR department together ?
(a) 54 (b) 46 (c) 49
(d) 50 (e) 52

42. Females in the HR dept of company C is what % more than male in HR department of company A ?
(a) 250% (b) 200% (c) 100%
(d) 300% (e) 150%

43. If total no. of employee in E is 25% more than D and no. of employee in HR dept is same as in company C, then employee other than HR dept in company E is what % of other dept employee in company B.
(a) 60% (b) 80% (c) 75%
(d) 50% (e) 55%

44. Find the difference between males of HR dept in company C and D together and females of HR dept in company B and C together ?
(a) 36 (b) 42 (c) 48
(d) 40 (e) 30

45. Find the average no. of employee other than HR dept. in A, B and C together ?
(a) 280 (b) 270 (c) 220
(d) 300 (e) 240

46. If there are total 150 females in company C then how many female employees are there other than females of HR department
(a) 90 (b) 100 (c) 80
(d) 110 (e) 120

Directions (47-51): Find the missing term in the following number series:

47. 1864, 1521, 1305, ? , 1116, 1089
(a) 1160 (b) 1180 (c) 1095
(d) 1205 (e) 1220

48. 18, ?, 9, 18, 72, 576
(a) 12 (b) 9 (c) 18
(d) 10 (e) 6

49. 12, 6.5, 7.5, 12.75, 27.5, ?
(a) 66.5 (b) 68.75 (c) 63.75
(d) 71.25 (e) None of these

50. 5 , 15, 50, ?, 1030, 6185
(a) 210 (b) 205 (c) 225
(d) 200 (e) 195

51. 130, 154, 186 , ? , 274, 330
(a) 216 (b) 220 (c) 240
(d) 226 (e) 230

52. If a boat travels 18 km more in downstream than in upstream in 3 hr. and if the speed of the Boat in still water is 20 km/hr. find the distance travelled by boat in downstream in 4 hr. ?
(a) 86 (b) 92 (c) 68
(d) 96 (e) None of these

53. If A invested Rs. 12000 at some rate of interest of S.I and B joined him after 3 months investing 16000 at same rate of interest if A leaves before 2 month of completion, then what will be the share of B's profit after 1 year if total profit is 22000 Rs. ?
(a) 10000 (b) 14000 (c) 12000
(d) 8000 (e) 11000

54. If ratio of ages of P and Q before 4 year ago is 5 : 4 and after 12 years sum of their ages will be 68 years, their what was P's age 2 years ago ?
(a) 24 years (b) 22 years (c) 18 years
(d) 26 years (e) 20 years

55. If Pipes A and B can fill a tank in 15 min and 20 mins respectively and pipe C empties the tank in 12 mins. what will be the time taken by A, B and C together to fill the tank completely?
(a) 25 min (b) 30 min (c) 40 min
(d) 20 min (e)35 min

Directions (56-60): Solve the given quadratic equations and mark the correct option based on your answer—
(a) $x > y$
(b) $x < y$
(c) $x \geq y$
(d) $x \leq y$
(e)$x = y$ or there is no relationship

56. (i) $x^2 = 81$ (ii) $y^2 - 18y + 81 = 0$

57. (i) $4x^2 - 24x + 32 = 0$ (ii) $y^2 - 8y + 15 = 0$

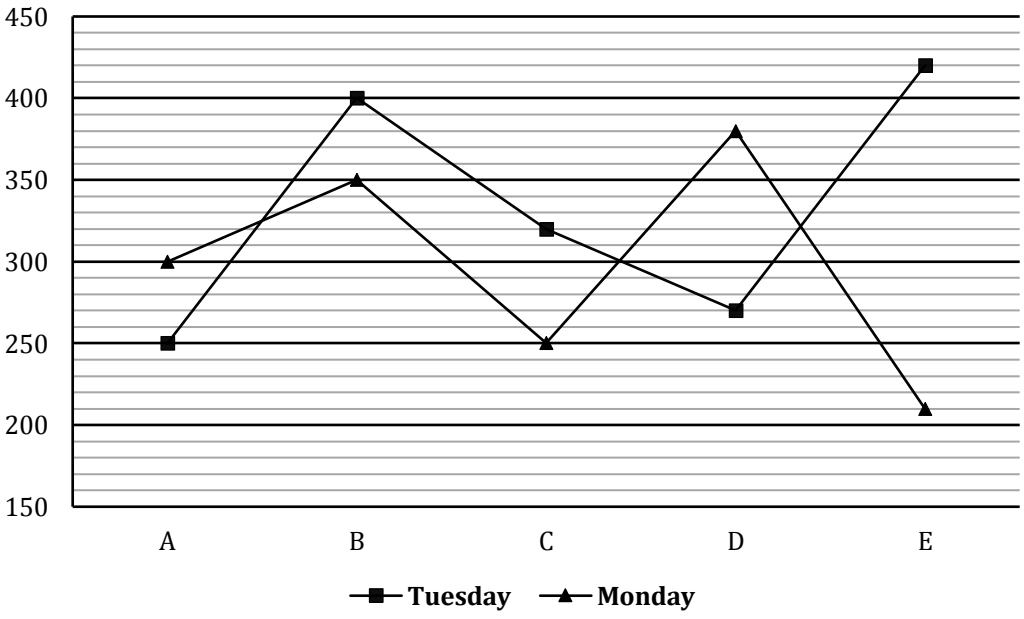
58. (i) $x^2 - 21x + 108 = 0$ (ii) $y^2 - 17y + 72 = 0$

59. (i) $x^2 - 11x + 30 = 0$ (ii) $y^2 - 15y + 56 = 0$

60. (i) $x^3 = 512$ (ii) $y^2 = 64$

61. If a shopkeeper marks an item 50% above its CP and if 12% discount is given on the marked price and the shopkeeper makes profit of 256 Rs, then what will be the actual cost price of the item?
(a) 1000 Rs. (b) 800 Rs. (c) 750 Rs.
(d) 1200 Rs. (e) 900 Rs.

Directions (62-67): The line graph shows the data of five seller selling an item(in units) on Monday and Tuesday.



62. The no. of item sold by A and C together is how much more or less then items sold by B and D together on both days ?
(a) 250 (b) 280 (c) 300
(d) 320 (e) 350

63. What is the average no. of items sold by all five sellers on Monday ?
(a) 298 (b) 305 (c) 280
(d) 300 (e) 315

64. Items sold by B and C on Tuesday together is what % more than same sellers on Monday together ?
(a) 25% (b) 30% (c) 20%
(d) 15% (e) 24%

65. Find the difference between items sold by B, D, E on Monday together items sold by B and E on Tuesday together
(a) 150 (b) 180 (c) 160
(d) 120 (e) 200

66. Item sold On Monday by C and E together is approximately what percentage of total items sold by A and B together on Tuesday ?
(a) 71% (b) 80% (c) 55%
(d) 85% (e)65%

67. Find the difference between the average items sold by A and B together on Monday and average of items sold by B and C together on Tuesday?
(a) 45 (b) 35 (c) 25
(d) 40 (e) 50

68. If A start from P with speed 60 km/hr at 8:00 am and B starts with speed 70 km/hr. at 8 : 30 am from Q and total distance between P and Q is 680 km, find at what time they will cross each other?
(a) 2 : 30pm (b) 1 : 30pm (c) 12 : 30pm
(d) 3 : 00pm (e) 4 : 00pm

69. If a person invested 6000 at T% S.I for 3 year and same amount at (T + 5)% CI for 2 year and difference between both interest is 60 Rs. then find T ?(in %)
(a) 15 (b) 18 (c) 20
(d) 24 (e) 25

Direction (70–74): Read the data carefully and answer the question.

There are 1800 students in two school 'A' & 'B' and three streams in each school i.e. art, science & commerce.18 $\frac{3}{4}$% of total students in school A arein commerce stream and 28 $\frac{4}{7}$% of total students in school B arein science stream. Sum of total students in commerce stream in A & science stream in B is 420. 19 $\frac{1}{21}$% of total students in school B are in commerce stream and 50% of total students in school A are in Art stream.

70. Total students in art stream in A is what percent more than total students in science stream in B?
(a) 75% (b) 70% (c) 90%
(d) 100% (e) 110%

71. Find the ratio of total students in commerce stream in B to total students in science stream in A?
(a) 8 : 15 (b) 8 : 17 (c) 8 : 13
(d) 8 : 11 (e) 8 : 9

72. If in school C total students are720 students and total students in science stream of school Care 25% more than total students in commerce stream in school B, then find total students ofart & commerce stream in school C is how much less than total students in art and commerce stream in school A?
(a) 120 (b) 110 (c) 150
(d) 100 (e) 140

73. Find the average number of students in science stream in school A & B?
(a) 250 (b) 270 (c) 240
(d) 200 (e) 225

74. If out of total students in art stream of school A & B ratio of boys to girl is 5 : 3 and 7 : 4 respectively, then find difference between boys and girls in art stream of school A & Btogether?
(a) 220 (b) 225 (c) 240
(d) 248 (e) 224

75. P invested 60% more than Q and R invested 20% more than Q. If ratio of investment time-period (P: Q: R) is 2: 4: 3 and the sum of profit shares of Q and R is Rs. 8550 then find the profit share of P.
(a) Rs. 3200 (b) Rs. 4000 (c) Rs. 2400
(d) Rs. 3600 (e) Rs. 3000

76. When a person sold an article, his profit percent is 60% of the selling price. If the cost price is increased by 75% and the selling price remains the same, then find decrement in the profit is what percent of the selling price of the article?
(a) 25% (b) 30% (c) 40%
(d) 27.5% (e) None of these

77. Area of Istcircle and circumference of IInd circle is 1386 cm^2 and 176 cm respectively. There is a square whose side is 35 $\frac{5}{7}$% of twice of sum of the radius of both the circles. Find the perimeter of the square (in cm)?
(a) 132 (b) 136 (c) 140
(d) 116 (e) 124

78. There are 5 red, 6 black and 5 blue balls in a bag. Out of these balls, four balls are picked at random from the bag. Then, what is the probability that one is red, two are black and one is blue ball?

(a) $\frac{75}{362}$ (b) $\frac{75}{364}$ (c) $\frac{71}{362}$
(d) $\frac{70}{363}$ (e) $\frac{5}{26}$

79. An article is marked $66\frac{2}{3}\%$ above the cost price and loss incurred on selling that article is 25% of the discount given on it. Then, find the discount % given?
(a) $48\frac{1}{3}\%$ (b) $53\frac{1}{3}\%$ (c) $58\frac{1}{3}\%$
(d) $63\frac{1}{3}\%$ (e) 60 %

80. A train travelling at 72 km/hr. classes a platform of 160 m in 18 second and another train travelling at 90 km/hr crosses the same platform in 15 second. Find the length of another train?
(a) 160 m (b) 180 m (c) 140 m
(d) 200 m (e) 215 m

Solutions

REASONING ABILITY

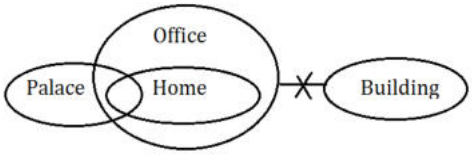
Direction (1-5):

Months	Persons
January	X
March	W
April	P
May	V
July	S
August	U
September	Q
October	T
November	R

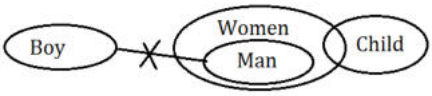
1. (a); 2. (e); 3. (e);
4. (b); 5. (a);

Direction (6-10):

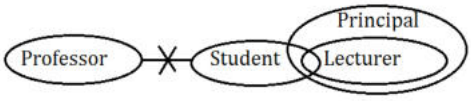
6. (d);



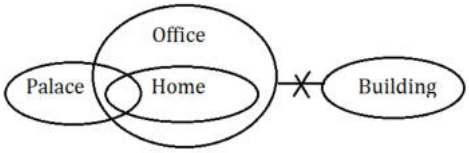
7. (c);



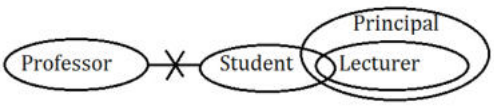
8. (a);



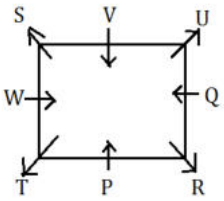
9. (b);



10. (a);

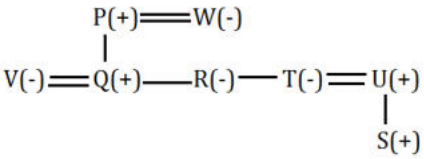


Direction (11-15):

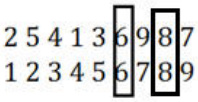


11. (e); 12. (b); 13. (b);
14. (d); 15. (a);

Direction (16-17):



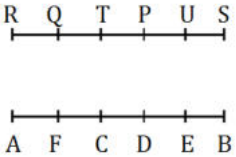
16. (c); 17. (a);
18. (b);



19. (e);

20. (e);

Directions (21-25):



21. (d); 22. (a); 23. (e);
24. (e); 25. (e);

Directions (26-30):

Word	Code
Right/centre	vo/na
Left	yo
Below/behind	ra/la
Ahead	sa
above	ha

26. (c); **27. (d);** **28. (a);**

29. (d); **30. (e);**

Directions (31-35):

Boxes
E
K
T
J
H
M
D
R
F
S
C

31. (c); **32. (d);** **33. (c);**

34. (c); **35. (d);**

Direction (36-40):

36. (c); **I.** P = C (False) **II.** C < P (False)

37. (e); **I.** H < W (True) **II.** G > H (True)

38. (a); **I.** Q < D (True) **II.** C < A (False)

39. (d); **I.** S ≥ B (False) **II.** F > E (False)

40. (a); **I.** G < N (True) **II.** I ≥ L (False)

Quantitative Aptitude

41. (c); Average no. of females in HR dept

$= \frac{80\times\frac{75}{100}+50\times\frac{80}{100}+100\times\frac{60}{100}+60\times\frac{60}{100}}{4}$

$= \frac{60+40+60+36}{4} = \frac{196}{4} = 49$

42. (b); Females in company C (HR) = $100 \times \frac{60}{100} = 60$

Males in company A (HR) = $80 \times \frac{25}{100} = 20$

Difference = 60 – 20 = 40

$\therefore \% = \frac{40}{20} \times 100 = 200\%$ more

43. (c); Total employee in E = $200 \times \frac{125}{100} = 250$

$\therefore$ employee of HR dept in E = 100

$\therefore$ other employee = 150

$\therefore$% of other employee = $150 \times \frac{100}{200} = 75\%$

44. (a); Males in HR dept in C and D

$= 100 \times \frac{40}{100} + 60 \times \frac{40}{100} = 40 + 24 = 64$

Females in HR dept of B and C = $50 \times \frac{80}{100} + 100 \times \frac{60}{100} = 100$

$\therefore$ Difference = 100 – 64 = 36

45. (e); Average of A, B, C = $\frac{220+200+300}{3} = \frac{720}{3} = 240$

46. (a); Total females in company C = 150

females in HR department in company C

$= 100\times\frac{60}{100} = 60$

therefore females other than in HR department = 150-60= 90

47. (b);

1864 1521 1305 **1180** 1116 1089

-343 -216 -125 -64 -27

$= -7^3$ $= -6^3$ $= -5^3$ $= -4^3$ $= -3^3$

48. (b); 18, ?, 9, 18, 72, 576

18 × 0.5 = 9

9 × 1 = 9

9 × 2 = 18

18 × 4 = 72

72 × 8 = 576

49. (d); 12 × 0.5 + 0.5 = 6.5

6.5 × 1 + 1 = 7.5

7.5 × 1.5 + 1.5 = 12.75

12.75 × 2 + 2 = 27.5

27.5 × 2.5 + 2.5 = 71.25

50. (b); 5 × 2 + 5 = 15

15 × 3 + 5 = 50

50 × 4 + 5 = 205

205 × 5 + 5 = 1030

1030 × 6 + 5 = 6185

51. (d);

130 154 186 **226** 274 330

+24 +32 +40 +48 +56

52. (b); (Ds –Du) 3 = 18 km
Different in 1 hr. = 6km
Ds and Du
∴ Speed of boat in still water = 20 km/hr.
Ds = 23 km/hr., Du = 17 km/hr.
Distance travelled = 4 × 23 = 92 km

53. (c);

A		B
12000		16000
×10		×9
120	:	144
5	:	6

∴ B's share = $22000 \times \frac{6}{11} = 12000$

54. (b); P Q
–4 5 4
+12 P + Q = 68
Age increased in 16 year = 32 years
Sum of Age of P and Q before 4 years = 36
∴ 5x + 4x = 36
X = 4
P's age 2 years ago = 5x + 2 = 22 years

55. (b);

A	B	C
15	20	12
+4	+3	–5
	60	

∴ tank filled in 1 min = 2 units
Total time = $\frac{60}{2}$ = 30 minutes

56. (d); $x^2 = 81$
$x = \pm 9$
$Y^2 - 18y + 81 = 0$
$(y - 9)^2 = 0$
∴ y = 9, 9
∴ x ≤ y

57. (e); $4x^2 - 24x + 30 = 0$
$4x^2 - 16x - 8x + 32 = 0$
4x (x – 4) –8 (x–4) = 0
x = 4, 2
$y^2 - 8y + 15 = 0$
$y^2 - 5y - 3y + 15 = 0$
y(y – 5)–3 (y – 5) = 0
∴ y = 5, 3
∴ No relation exists

58. (c); $x^2 - 21x + 108 = 0$
$x^2 - 9x - 12x + 108 = 0$
x(x – 9) – 12 (x – 9) = 0
x = 9, 12
$y^2 - 17y + 72 = 0$
∴ $y^2 - 8y - 9y + 72 = 0$
y (y – 8) – 9 (y – 8) = 0
∴ y = 8, 9
∴ x ≥ y

59. (b); $x^2 - 11x + 30 = 0$
$x^2 - 6x - 5x + 30 = 0$
∴ x(x – 6) – 5(x – 6) = 0
x = 6, 5
$y^2 - 15y + 56 = 0$
$y^2 - 7y - 8y + 56 = 0$
y (y – 7) – 8 (y – 7) = 0
∴ y = 7, 8
∴ x < y

60. (c); $x^3 = 512$
$x = \sqrt[3]{512} = 8$
$y^2 = 64$
$y = \sqrt{64} = \pm 8$
∴ x ≥ y

61. (b); Let CP = 100 x
∴ marked price = 150x
∴ selling price after giving discount = 132x
∴ 32x = 256
x = 8
∴ CP = Rs 800

62. (b); Item sold by A and C = 550 + 570 = 1120
Item sold by B and D = 750 + 650 = 1400
∴ diff. =1400 – 1120 = 280

63. (a); Average = $\frac{300+350+250+380+210}{5} = \frac{1490}{5} = 298$

64. (c); Item sold by B and C on Monday = 350 + 250 = 600
Item sold by B and C on Tuesday = 400 + 320 = 720
∴ % increase = $120 \times \frac{100}{600} = 20\%$

65. (d); Items sold on Monday by B, D and E = 350 + 380 + 210 = 940
Item sold on Tuesday by B and E = 400 + 420 = 820
∴ diff = 940 – 820 = 120

66. (a); Item sold by C and E on Monday = 250 + 210 = 460
Item sold by A and B together on Tuesday = 400 + 250 = 650
∴ ? = $460 \times \frac{100}{650}$
≃ 71% (approx)

67. (b); Avg. by A and B on Monday = $\frac{650}{2} = 325$
Avg. of B and C on Tuesday = $\frac{720}{2} = 360$
Diff. = 360 – 325 = 35

68. (b);

680 km

P		Q
A		B
8 am		8 : 30
60km/hr		70 km/hr

Dist travelled by A in $\frac{1}{2}$ hr = 30 km
Remaining distance to be covered = 680 – 30 = 650 km
Relative speed = 60 + 70 = 130
∴ time taken = $\frac{650}{130}$ = 5 hr
∴ time = 8 : 30 + 5 hr = 1 : 30 pm

69. (a); By going with the options
Interest received at SI = $\frac{6000\times3\times15}{100}$ = 2700 Rs
∴ T + 5 = 20%
Interest received after 2 yrs at CI = $\frac{6000\times44}{100}$ = 2640
∴ Difference = 2700 – 2640 = 60 Rs
T=15%

S (70–74):
Let total students in A = x
And, total students in B = y
Total students in school A in commerce stream = $x \times \frac{75}{4} \times \frac{1}{100} = \frac{3x}{16}$
Total students in school B in science stream = $y \times \frac{200}{7} \times \frac{1}{100} = \frac{2y}{7}$
Given, $\frac{3x}{16} + \frac{2y}{7} = 420$ ... (i)
And $x + y = 1800$ ... (ii)
So, from (i) and (ii),
Total students in school A = 960
And total students in school B = 840
Total students in school B in commerce stream
$= \frac{400}{21} \times \frac{1}{100} \times 840 = 160$
Total students in school A in art stream = $\frac{1}{2} \times 960 = 480$
Now, total students in school A in science stream
$= 960 - \frac{3}{16} \times 960 - 480 = 300$
And total students in school B in art stream
$= 840 - \frac{2}{7} \times 840 - 160 = 440$

Streams	A	B
Art	480	440
Commerce	180	160
Science	300	240

70. (d); Required percentage = $\frac{480-240}{240} \times 100 = 100\%$

71. (a); Required ratio = $\frac{160}{300}$ = 8 : 15

72. (e); Total student art & commerce stream in C
$= 720 - 160 \times \frac{125}{100} = 520$
Required difference = (480 + 180) – 520 = 140

73. (b); Required average = $\frac{300+240}{2}$
$= \frac{540}{2} = 270$

74. (c); Total boys in art stream of school A & Btogether
$= 480 \times \frac{5}{8} + 440 \times \frac{7}{11} = 300 + 280 = 580$
Total girls in art stream of school A & B together
$= 480 \times \frac{3}{8} + 440 \times \frac{4}{11} = 180 + 160 = 340$
Required difference = 580 −340 = 240

75. (d); Let the investment of Q = 100x
Investment of P = 160x
Investment of R = 120x
Ratio of profit:

P	Q	R
160x × 2	100x × 4	120x × 3
8	: 10	: 9

ATQ,
19 unit = Rs. 8550
8 unit = 450 × 8 = Rs. 3600

76. (b); Let the selling price be 250x
then, profit = 150x
CP=250x − 150x = 100x
Now, new C.P. = $100x \times \frac{175}{100}$ = 175x
New S.P. = 250x
New profit = 250x – 175x = 75x
Required % = $\frac{150x-75x}{250x} \times 100 = 30\%$

77. (c); Circumference of any circle = 2π × radius
Radius of 1st circle = $\sqrt{\frac{1386}{\pi}}$ = 21 cm
Radius of 2nd circle = $\frac{176}{2\pi}$ = 28 cm
Side of square = $\frac{5}{14} \times 2 \times (21 + 28)$ = 35 cm
Perimeter of square = 4 × 35 = 140 cm

78. (b); Ways to select 4 balls out of 16 balls = 16_{C_4}
Ways to select one red balls = 5_{C_1}
Ways to select two black balls = 6_{C_2}
Ways to select one blue balls = 5_{C_1}
∴ Required probability = $\frac{5_{C_1}\times6_{C_2}\times5_{C_1}}{16_{C_4}} = \frac{75}{364}$

79. (b); Let the cost price be Rs 3x
Then the marked price= Rs 5x
And let the discount given be Rs 4y
Then loss incurred= Rs y
ATQ
3x − y = 5x − 4y
3y = 2x
Marked price=Rs $\frac{15}{2}$y
Required discount %=$\frac{4y}{\frac{15}{2}y} \times 100 = 53\frac{1}{3}\%$

80. (e); Speed of 1st train = $72 \times \frac{5}{18}$ = 20 m/s
∴ Dist travelled by 1st train = 20 × 18 = 360 m
∴ length of train (1st) = 360 – 160 = 200 m
Speed of 2nd train = $90 \times \frac{5}{18}$ = 25 m/s
∴ Distance travelled = 25 × 15 = 375 m
∴ length of 2nd train = 375 − 160 = 215 m

Mock 32

IBPS RRB PO Prelims 2018

REASONING ABILITY

Direction (1-5): Study the following information carefully and answer the given questions:

Eleven boxes A, B, C, D, E, F, G, H, I, J, K are kept one above the other. Box G is kept at fifth position from the top. Two boxes are kept between G and H. Box D is kept just above box H. There are as many boxes above box D as below box B. Five boxes are kept between box F and box K, which is kept at one of the positions below box G. Box A is kept at one of the positions above box F. Only one box is kept between Box G and Box C. Box I is kept above box E but not just above. Box E is not kept immediately above or immediately below box C.

1. What is the position of box I?
(a) 8th from the bottom
(b) 7th from the top
(c) 3rd from the top
(d) 6th from the bottom
(e) none of these

2. How many boxes are kept between box E and Box H?
(a) seven (b)six (c) five
(d) four (e) eight

3. Which among the following statement is true regarding box J?
(a) it is 7th from the bottom
(b) Box K is placed above box J
(c) only two boxes are kept between box B and box J
(d) It is kept just below box H
(e) All are true

4. Which of the following represents the boxes kept between boxes A and I?
(a)C, B (b) A, K (c) F, G
(d) J, D (e) none of these

5. Which of the following box is kept just above box B?
(a) C (b) K (c) F
(d) D (e) none of these

Direction (6-8): Study the following information carefully and answer the given questions
Point B is 14m east of point A. Point C is 9m north of point B. Point D is 12m east of point C. Point E is 15m south of point D. Point F is 30m west of point E. Point G is 10m north of point F. Point H is 18 m east of point G.

6. If point X is 6m south of point A then which point is at shortest distance from point X?
(a) E (b) A (c) F
(d) B (e) G

7. What is the distance of point C from point H?
(a) 9m (b) 5m (c) 4m
(d) 6m (e) 7m

8. Point B is in which direction with respect to point F?
(a) South (b) South-east (c) North
(d) North-east (e) North-west

Direction (9-13): Study the following information carefully and answer the given questions
Eight persons A, B, C, D, E, F, G, H are sitting around a circular table such that five of them are facing towards the center and the rest are facing away from the center. Three persons are sitting between F and H, who is facing center. C is 2nd to the right of F and faces opposite direction to F. A sits 3rd to the left of C.G is one of the neighbor of E. Two persons sit between G and B, who is not neighbor of H.G does not face C. G and A face same direction but opposite to F.

9. What is the position of E with respect to A?
(a) immediate right (b) 5th to the left
(c) 2nd to the right (d) 2nd to the left
(e) none of these

10. How many persons are sitting between C and H, wen counted from the left of C?
(a) one (b) two (c) three
(d) four (e) none

11. Four of the five are alike in a certain way, which among the following does not belongs to that group?
(a) C (b) B (c) F
(d) D (e) E

12. Which of the following represents the immediate neighbor of G?
(a) C (b) B (c) F
(d) D (e) A

13. Which of the following is not true regarding F?
(a) it faces towards the center
(b) E is immediate left to F
(c) Two persons sit between F and D, when counted from the right to D
(d) All are true
(e) no one sits between F and B

Direction (14-18): Study the following information carefully and answer the given questions.

Certain number of persons are sitting in a row facing north. M sits 4th to the right of S. Five persons sit between M and X. T sits at one of the positions left to S. The number of persons sitting between M and U are same as between S and T. Q is 2nd from one of the extreme ends. Four persons sit between S and U. No one sits to the right of N, who is immediate right to P. X is 3rd left to P. Not more than two persons sit between Q and U.

14. How many persons are sitting in the row?
(a) 17 (b) 20 (c) 24
(d) 26 (e) 27

15. How many persons are sitting between S and T?
(a) seven (b)six (c) five
(d) four (e) eight

16. What is the position of U from the left end?
(a) 6th (b) 5th (c) 4th
(d) 2nd (e) 3rd

17. How many persons are sitting between Q and M?
(a) seven (b) eleven (c) ten
(d) nine (e) eight

18. Which of the following represents the person sitting at extreme end?
(a) M (b) U (c) X
(d) P (e) T

19. If the second, forth, seventh and eighth letter of the word "FRACTION" are combined to form a meaningful word, then what will be the 3rd letter from the left in the so formed word. If more than one meaningful word is formed then the answer is X, if no such word is formed then answer is Z?
(a) O (b) X (c) R
(d) Z (e) C

20. How many pair of digits have same number of digits between them in the number "573814269" as in the numeric series?
(a) five (b) four (c) six
(d) three (e) more than six

Direction (21-25): Study the following information carefully and answer the given questions:

Movies of different duration released on different days starting from Monday to Friday (starting from Monday). Movie A was released On Tuesday. No movie released between A and the one which is of 75-minute duration. Only one movie is released between the one which is of 75-minute duration and the one which is of 100-minute duration. No movie released between the one which is of 100 minute and B. Only one movie released after B. B released immediately after 100-minute duration movie. Movie C released immediately after the one which is of 130-minute duration. More than two movies released in between C and D. The movie which is of 90-minute duration released before E. One of movie was of 20 minutes more duration than E.

21. How many movies were released after E?
(a) One (b) Two (c) None
(d) Three (e) More than three

22. Which of the following movie was of 150-minute duration?
(a) E
(b) A
(c) There is no such movie
(d) C
(e) D

23. What is the total duration of movie D and E together?
(a) 135 (b) 225 (c) 165
(d) 175 (e) 190

24. Which of the following statement is true regarding B?
(a) The movie released after B is of 120-minute duration
(b) Two movies released in between A and B
(c) Movie B is of 100-minute duration
(d) Total duration of movie B and A is 225 minutes
(e) Movie A released after B.

25. Which of the following statement is true?
(a) The movie released before A is of 130-minute duration
(b) Three movies released in between A and E
(c) No movie released in between A and E
(d) Total duration of movie C and A is 230 minutes
(e) Movie C released immediately after E.

Direction (26-28): Study the following information carefully and answer the given questions:
F is the husband of G. K is the mother-in-law of G. H is the Father of F. M is the mother of H, P is the mother of K and B.

26. If Y is the father of H then how is Y related to M?
(a) Mother (b) Father (c) Sister
(d) Brother (e) Husband

27. How is P related to F?
(a) Grandfather (b) Aunt (c) Mother
(d) Grandmother (e) Wife

28. How is B related to H?
(a) Sister (b) Brother (c)Husband
(d) Can't be determine (e) Wife

Direction (29-31): Study the following information carefully and answer the given questions:There are six persons M, N, O, P, Q, R of different heights. N is shorter than M but taller than Q. Only two person are taller than M. R is taller than Q and O. Q is not the shortest. The one who is second shortest is 154m. P is not the shortest person.

29. If M is 19m taller than Q then what is the height of M?
(a) 190m (b) 181m (c) 175m
(d) 130m (e) 173m

30. If P is 181m than which of the following is true?
I. Only one person is taller than P.
II. The difference between the heights of P and Q is 27m
III. O is the shortest person.
(a) Only I (b) Only II and I
(c) All are true (d) Only III and II
(e) Only III and I

31. How many persons are shorter than N?
(a) One (b) Two (c) None
(d) Three (e) More than three

Directions (32-35): Question consists of Some statements followed by two conclusions. Consider the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follow from the given statements using all statements together.

32. Statements: All Grills are Arrow. Some Hat are Grills. Some Cell are Arrow.
Conclusions:
I. Some Cell are definitely not Grills.
II. Some Hat can never be Arrow.
(a) Only I follows
(b) Only II follows
(c) Neither I nor II follow
(d) Both I and II follow
(e) Either I or II follow

33. Statements: All Grills are Arrow. Some Hat are Grills. Some Cell are Arrow.
Conclusions:
I. Some Hat are Arrow.
II. Some Grills are Cell.
(a) Only II follows
(b) Only I follows
(c) Either I nor II follow
(d) Both I and II follow
(e) Neither I or II follow

34. Statements: Some Door are Fan. No Door is Rose. No Fan is Shelf.
Conclusions:
I. Some Fan can never be Rose.
II. Some Rose are Shelf is a possibility.
(a) Neither I nor II follows
(b) Only I follows
(c) Either I or II follow
(d) Both I and II follow
(e) Only II follows

35. Statements: Some Door are Fan. No Door is Rose. No Fan is Shelf.
Conclusions:
I. All Door are Shelf is a possibility.
II. All Shelf can be Doors.
(a) Either I or II follows
(b) Only II follows
(c) Neither I nor II follow
(d) Both I and II follow
(e) Only I follows

Direction (36-40): Study the following information carefully and answer the given questions:
Fourteen persons are sitting in two parallel rows such that seven persons are sitting in each row. A, B, C, D, E, F, G are sitting in row-1 facing north while P, Q, R, S, T, U, V are sitting in row-2 facing south. G sits third to the left of A and neither of them sits at an extreme end of the row. The one faces A sits immediate right to T. Only one person sits between T and Q. The one who faces Q sits third to the right of E. S sits to the immediate left of V. S neither faces G nor E. D is an immediate neighbour of the one who faces S. The one who faces C sits fifth to the left of P. B sits third to the left of F. U sits at one of position to the right of R.

36. Four of the following are alike in a certain way so form a group which of the following does not belong to that group?
(a) U (b) B (c) T
(d) C (e) P

37. How many persons sits between F and C?
(a) One (b) Two (c) None
(d) Three (e) More than three

38. Which of the following is not true regarding U?
(a) No one sits to the right of U
(b) U sits third to the right of Q,
(c) P is an immediate neighbour of U.
(d) E is an immediate neighbour of the one who faces U,
(e) Only two persons sit between U and S

39. What is the position of C with respect to A?
(a) Second to the left
(b) Third to the right
(c) Immediate right
(d) Immediate left
(e) Second to the right

40. What is the position of B with respect to D?
(a) Third to the left
(b) Second to the left
(c) Forth to the left
(d) Third to the right
(e) Fifth to the right

QUANTITATIVE APTITUDE

Directions (41-45): Find the wrong number in the following number series ?

41. 1, 3, 7, 15, 31, 64, 127
(a) 1 (b) 3 (c) 15
(d) 64 (e) 127

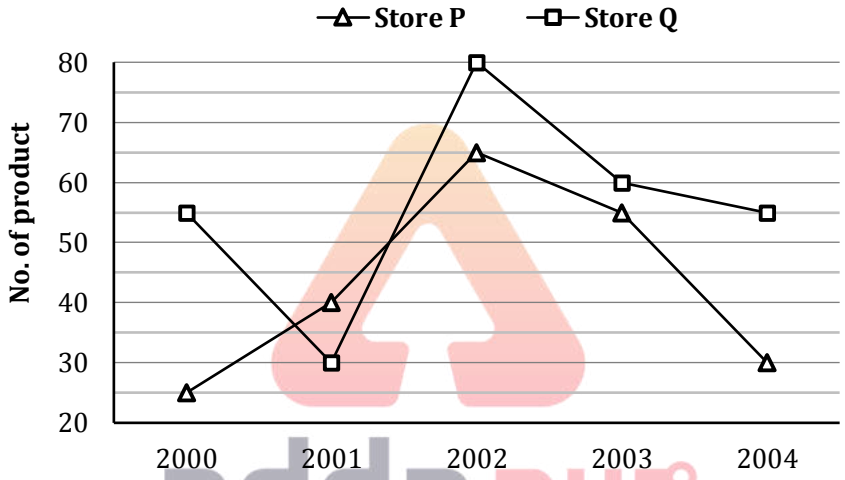
42. 1, 15, 119, 475, 949, 947, 473
(a) 947 (b) 475 (c) 15
(d) 473 (e) 1

43. 250, 260, 291, 314, 340, 370, 405
(a) 370 (b) 314 (c) 260
(d) 405 (e) 250

44. 750, 535, 411, 348, 322, 314, 315
(a) 315 (b) 750 (c) 411
(d) 348 (e) 314

45. 2, 7, 27, 107, 427, 1708, 6827
(a) 107 (b) 1708 (c) 2
(d) 6827 (e) 7

Directions (46-50): Study the line-graph carefully & answer the question given below.
Line-graph given below shows the total no. of products for (kid + adult) in two different stores P & Q in five different years.



46. What is the difference between total no. of products in store P in year 2003 & 2004 together and total no. of products in year 2000?
(a) None of these (b) 10 (c) 20
(d) 15 (e) 5

47. If total products in both the stores in year 2006 is increased by 20% as compared to year 2004. Then find total no. of products in year 2006?
(a) 102 (b) None of these
(c) 96 (d) 108
(e) 92

48. What is the ratio of total products in store Q in year 2002 & 2003 together to total products in store Q in year 2000?
(a) 23 : 12 (b) 23 : 11 (c) 28 : 11
(d) None of these (e) 27 : 13

49. What is the average no. of products in all the years together in store P?
(a) 48 (b) 43 (c) 57
(d) None of these (e) 53

50. Total no. of products in store P in year 2003 and in store Q in year 2004 together is what percent more/less than total no. of products in store Q in year 2000?
(a) 150% (b) 40% (c) 125%
(d) 100% (e) 50%

Directions (51-55): Solve the given quadratic equations and mark the correct option based on your answer—
(a) $x \geq y$
(b) $x \leq y$
(c) $x > y$
(d) x = y or no relation can be established between x and y.
(e) $x < y$

51. **(i)** $x^2 - 20x + 96 = 0$
(ii) $y^2 = 64$

52. **(i)** $4x^2 - 21x + 20 = 0$
(ii) $3y^2 - 19y + 30 = 0$

53. **(i)** $x^2 - 11x + 24 = 0$
(ii) $y^2 - 12y + 27 = 0$

54. **(i)** $x^2 + 12x + 35 = 0$
(ii) $5y^2 + 33y + 40 = 0$

55. **(i)** $4x^2 + 9x + 5 = 0$
(ii) $3y^2 + 5y + 2 = 0$

Directions (56-60): Study the following paragraph carefully & answer the question given below.

There are 1000 students in a college. Out of 1000 students some appeared in exams 'X', 'Y' and 'Z' while some not. Number of student not appeared in any exam is equal to number of students appeared in exam 'Z' only. Number of students appeared in exam 'Y' is 360. Ratio of number of students appeared in exam 'X' and 'Y' only to number of students appeared in exam 'Y' and 'Z' only is 2 : 3. Number of student appeared in exam 'X' and 'Z' both is half of number of students appeared in only exam 'Z'. Number of students appeared in exam 'X' only is 50% more than number of students appeared in 'Y' only. Number of students appeared in all the three exam is 4% of the total number of students in the college. Number of students appeared in 'Y' exam only is same as number of students appeared in 'Y' and 'Z' only.

56. How many students appeared in at least two exams?
(a) 240 (b) 260 (c) 300
(d) 360 (e) 500

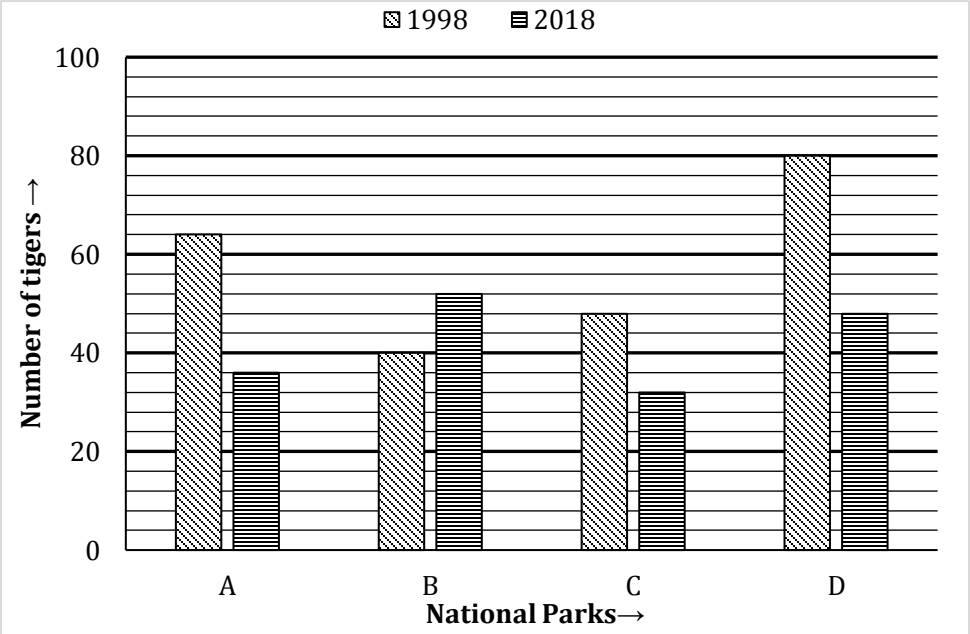
57. How many students appeared in two exams only?
(a) 280 (b) 220 (c) 340
(d) 300 (e) 260

58. How many students appeared in at most two exams?
(a) 240 (b) 260 (c) 300
(d) 500 (e) 960

59. How many students not appeared in exam Y?
(a) 440 (b) 360 (c) 540
(d) 640 (e) None of these

60. How many students appeared in exam X or in exam Z?
(a) 240 (b) 360 (c) 500
(d) 680 (e)760

Direction (61-65): Bar chart given below shows Number of tigers in different National Parks i.e. A to D of a country in two different years. Study the data carefully and answer the following questions



61. Number of tigers in National Park B and C together in 2018 is how much less more/less than Number of tigers in National Park A and D together in 1998?
(a) 40 (b) 44 (c) 52
(d) 60 (e) 72

62. Number of tigers in National Park 'D' in both years together is what percent of the Number of tigers in National Park 'C' in both years together?
(a) 60% (b) 160% (c) 140%
(d) 120% (e) 180%

63. Find the ratio between number of tigers in National Park 'A' in 2018 to number of tigers in National Park 'B' in 1998?
(a) 9 : 10 (b) 10 : 9 (c) 16 : 13
(d) 13 : 16 (e) 3 : 4

64. Number of tigers in National Park 'E' in 2018 is 40% more than number of tigers in National Park 'D' in 1998 while number of tigers in National park 'E' in 1998 is 25% less than number of tigers in National Park 'C' in 2018. Find total number of tigers in National park 'E' in 1998 and 2018 together?
(a) 148 (b) 84 (c) 172
(d) 160 (e) 136

65. Average number of tigers in all National park in 2018 is how much less/more than average number of tigers in all National park in 1998?
(a) 14 (b) 16 (c) 18
(d) 20 (e) 22

66. The difference between downstream speed and upstream speed of boat is 6 km/hr and boat travels 72 km from P to Q (downstream) in 4 hours. Then find the speed of boat in still water?
(a) 15 km/hr (b) 18 km/hr (c)20km/hr
(d) 16 km/hr (e) 24 km/hr

67. In a vessel, there are two types of liquids A and B in the ratio of 5 : 9. 28 lit of the mixture is taken out and 2 lit of type B liquid is poured into it, the new ratio(A:B) thus formed is 1 : 2. Find the initial quantity of mixture in the vessel?
(a) 84 lit (b) 42 lit (c) 50 lit
(d) 56 lit (e) 70 lit

68. The average weight of 5 students in a class is 25.8 kg. When a new student joined them, the average weight is increased by 3.9 kg. Then find the approximate weight of the new student.
(a) 55 kg (b) 49 kg (c) 42 kg
(d) 44 kg (e) 58 kg

69. A person has purchased two adjacent plots, one is in rectangular shape and other is in square shape and combined them to make a single new plot. The breadth of the rectangular plot is equal to the side of the square plot and the cost of fencing the new plot is Rs. 390 (Rs. 5/m). Find the side of square if the length of the rectangular plot is 15 m.
(a) 10 m (b) 8 m (c) 12 m
(d) 9 m (e) 6 m

70. A shopkeeper marked his article 50% above the cost price and gives a discount of 20% on it. If he had marked his article 75% above the cost price and gives a discount of 20% on it then find the earlier profit is what percent of the profit earned latter?
(a) 50% (b) 60% (c) $33\frac{1}{3}\%$
(d) 40% (e) 75%

71. A person invested two equal amounts in two different schemes. In first scheme, amount is invested at 8% p.a. on SI for T years and SI received is Rs 2000 while in second scheme, amount is invested at 10% p.a. for 2 years at CI and the compound interest received is Rs. 1050. Find the value of T.
(a) 4 yr (b) 8 yr (c) 6 yr
(d) 5 yr (e) 3 yr

72. Satish saves 20% of his monthly salary. And of the remaining salary $\frac{1}{4}$th and $\frac{1}{2}$th he gives to his mother and sister respectively and the remaining salary he submits as his EMI for the payment of his car. If his annual EMI was Rs. 60,000, then find his monthly salary?
(a) Rs. 40,000 (b) Rs. 35,000
(c) Rs. 32,000 (d) Rs. 30,000
(e) Rs. 25,000

73. The sum of four times of an amount 'x' and (x – 9.75) is Rs. 442. Find the approximate value of x.
(a) Rs. 85 (b) Rs. 90 (c) Rs. 100
(d) Rs. 1100 (e) Rs. 75

74. A and B entered into a partnership by investing some amounts. The investment of A is twice of the investment of B. Another person C joined them after 4 months. At the end of a year, the profit share of A and C is equal. Then find the profit share of B is what percent of the profit share of C.
(a) 50% (b) $33\frac{1}{3}\%$ (c) 40%
(d) 60% (e) 75%

75. The ratio of age of Ishu 8 years hence and that of Ahana 6 years hence is 5 : 6. The age of Ishu 10 years hence is equal to the age of Ahana 6 years hence. Then, find the present age of Ishu.
(a) 1.5 yr (b) 2 yr (c) 3 yr
(d) 4 yr (e) 5 yr

76. What is the difference between 20% of P and 20% of (P + 5000).
(a) 1500 (b) 1200 (c) 1000
(d) 2000 (e) 1600

77. The ratio of the diameter of base and height of a cylinder is 2 : 3. Find the radius of the cylinder if the approximate volume of cylinder is 3234.01 cm^3?
(a) $\frac{21}{2}$ cm (b) $\frac{7}{2}$ cm (c) 21 cm
(d) 7 cm (e) 14 cm

78. A train of some length passes the platform of length 524 m in 55 seconds. Find the length of train if the speed of train is 72 km/hr.
(a) 476 m (b) None of these
(c) 428 m (d) 526 m
(e) 576 m

79. Efficiency of B is two times more than efficiency of A. Both started working alternatively, starting with B and completed the work in total 37 days. If C alone complete the same work in 50 days then find in how many days A and C together will complete the work?
(a) 24 days (b) 30 days (c) 36 days
(d) 48 days (e) 18 days

80. 7 men and 6 women together can complete a piece of work in 8 days and work done by a women in one day is half the work done by a man in one day. If 8 men and 4 women started working and after 3 days 4 men left the work and 4 new women joined then, in how many more days will the work be completed
(a) 7 days (b) 6 days (c) 5.25 days
(d) 6.25 days (e) 8.14 days

Solutions

REASONING ABILITY

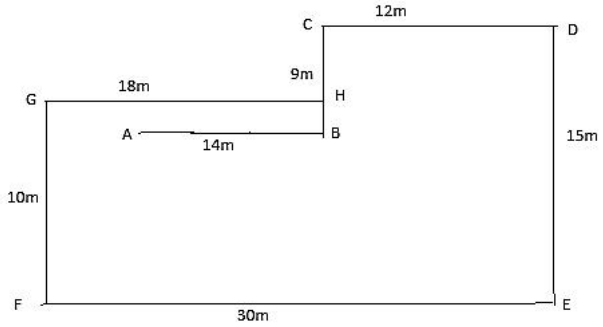
Direction (1-5):

BOX
D
H
A
F
G
I
C
J
E
K
B

1. (d); 2. (b); 3. (c);

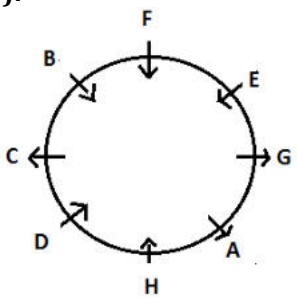
4. (c); 5. (b);

Direction (6-8):



6. (c); 7. (b); 8. (d);

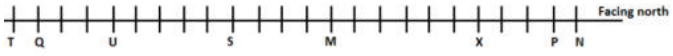
Direction (9-13):



9. (d); 10. (a); 11. (a);

12. (e); 13. (c);

Direction (14-18):

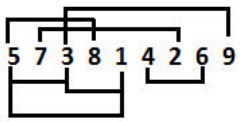


14. (c); 15. (e); 16. (b);

17. (b); 18. (e);

19. (c); 2nd, 4th,7th and 8th letters are R, C, O, N
The meaningful word formed is CORN

20. (e);



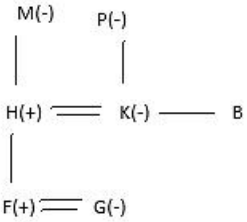
Direction (21-25):

Days	Movies	Duration
Monday	D	75
Tuesday	A	90
Wednesday	E	100
Thursday	B	130
Friday	C	120

21. (b); 22. (c); 23. (d);

24. (a); 25. (c);

Direction (26-28):



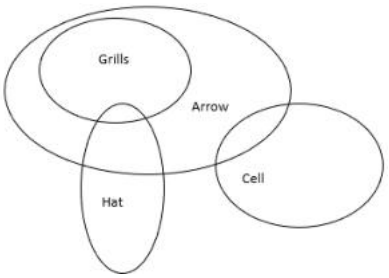
26. (e); 27. (d); 28. (d);

Direction (29-31): R/P > R/P > M > N > Q > O

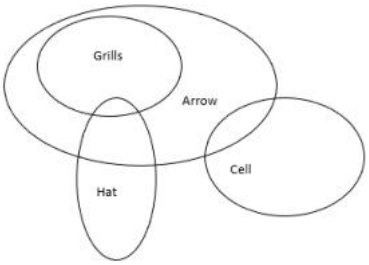
29. (e); 30. (d); 31. (b);

Directions (32-35):

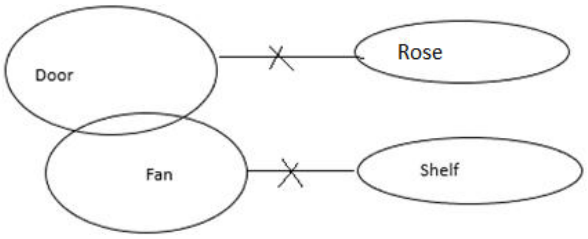
32. (c);



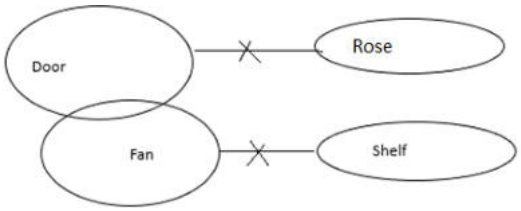
33. (b);



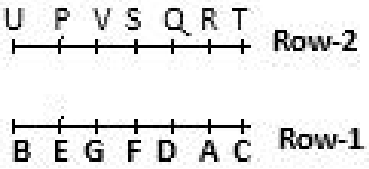
34. (d);



35. (b);



Direction (36-40):



36. (e);

37. (b);

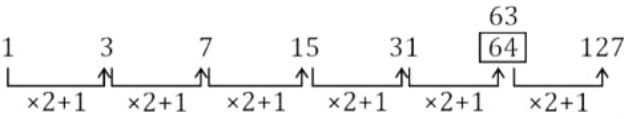
38. (b);

39. (c);

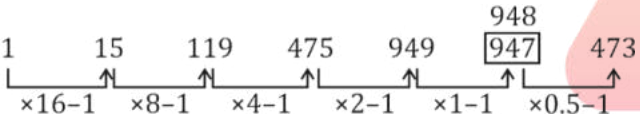
40. (c);

QUANTITATIVE APTITUDE

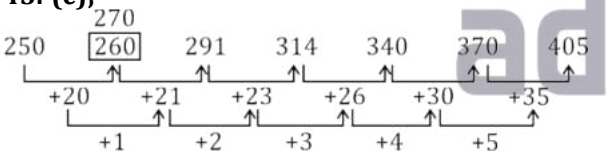
41. (d);



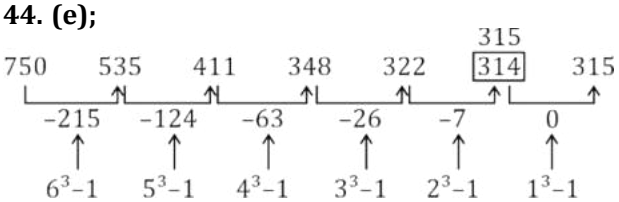
42. (a);



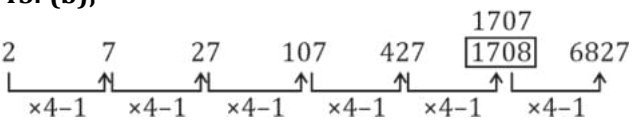
43. (c);



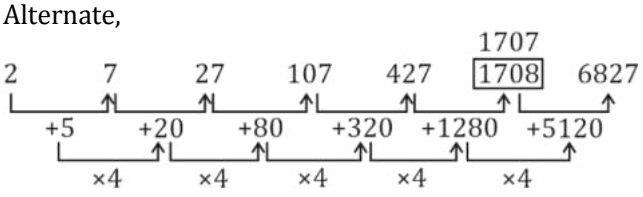
44. (e);



45. (b);



Alternate,



46. (e); Required difference
= (55 + 30) – (55 + 25) = 5

47. (a); Total no. of products in year 2006
$= (55 + 30) \times \frac{120}{100} = 102.0$

48. (c); Required ratio
$= \frac{80+60}{55} = \frac{140}{55} = 28 : 11$

49. (b); Required Average
$= \frac{25+40+65+55+30}{5} = \frac{215}{5} = 43$

50. (d); Required percentage
$= \frac{(55+55)-55}{55} \times 100$
$= \frac{55}{55} \times 100 = 100\%$

51. (a); **(i)** $x^2 - 20x + 96 = 0$
$x^2 - 12x - 8x + 96 = 0$
$x(x-12) - 8(x-12) = 0$
$(x-12)(x-8) = 0$
$x = 12, 8$

(ii) $y^2 = 64$
$y = \pm 8$
$\therefore x \geq y$

52. (d); **(i)** $4x^2 - 21x + 20 = 0$
$4x^2 - 16x - 5x + 20 = 0$
$4x(x-4) - 5(x-4) = 0$
$(4x-5)(x-4) = 0$
$x = \frac{5}{4}, 4$

(ii) $3y^2 - 19y + 30 = 0$
$3y^2 - 9y - 10y + 30 = 0$
$3y(y-3) - 10(y-3) = 0$
$(3y-10)(y-3) = 0$
$y = \frac{10}{3}, 3$
$\therefore$ No relation can be established between x and y

53. (d); **(i)** $x^2 - 11x + 24 = 0$
$x^2 - 8x - 3x + 24 = 0$
$x(x-8) - 3(x-8) = 0$
$(x-3)(x-8) = 0$
$x = 3, 8$

(ii) $y^2 - 12y + 27 = 0$
$y^2 - 9y - 3y + 27 = 0$
$y(y-9) - 3(y-9) = 0$
$(y-9)(y-3) = 0$
$y = 9, 3$
∴ No relation can be established between x and y

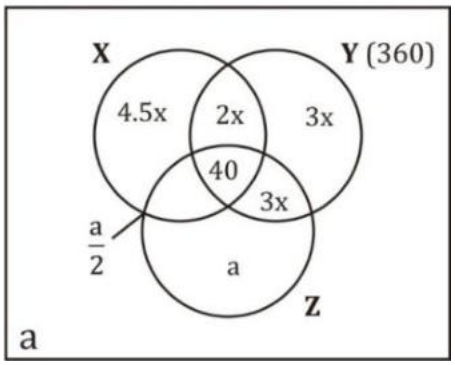
54. (b); **(i)** $x^2 + 12x + 35 = 0$
$x^2 + 7x + 5x + 35 = 0$
$x(x+7) + 5(x+7) = 0$
$(x+7)(x+5) = 0$
$x = -7, -5$

(ii) $5y^2 + 33y + 40 = 0$
$5y^2 + 25y + 8y + 40 = 0$
$5y(y+5) + 8(y+5) = 0$
$(y+5)(5y+8) = 0$
$y = -\frac{8}{5}, -5$
$\therefore y \geq x$

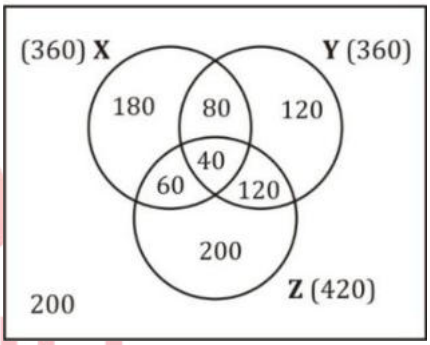
55. (b); **(i)** $4x^2 + 9x + 5 = 0$
$4x^2 + 4x + 5x + 5 = 0$
$4x(x+1) + 5(x+1) = 0$
$(4x+5)(x+1) = 0$
$x = -1, -\frac{5}{4}$

(ii) $3y^2 + 5y + 2 = 0$
$3y^2 + 3y + 2y + 2 = 0$
$3y(y+1) + 2(y+1) = 0$
$(3y+2)(y+1) = 0$
$y = -\frac{2}{3}, -1$
$\therefore y \geq x$

Solutions (56-60):
Total students = 1000
Let, students appear in exam Z only = a
Total students appeared in exam Y = 360
Ratio of number of students appeared in exam X and Y only to students appeared in exam Y and Z only = 2 : 3
Students appeared in exam X and Z both
= a/2
Number of students appeared in all three exams $= \frac{4}{100} \times 1000 = 40$
Number of students appeared in Y exam only
= No. of students appeared in Y and Z only
= 3x
Number of students appeared in exam X and Y only
$= \frac{2}{3} \times 3x = 2x$
1000



Now, 2x + 3x + 3x + 40 = 360
⇒ x = 40
$and, 12.5x + a + \frac{a}{2} + a = 1000$
$\frac{5a}{2} = 500$
⇒ a = 200
1000



56. (c); Students appeared in atleast two exams = 80 + 60 + 40 + 120
= 300

57. (e); Students appeared in two exams only = 80 + 60 + 120 = 260

58. (e); Students appeared in atmost two exams = 180 + 120 + 200 + 60 + 80 + 120 + 200= 960

59. (d); Student not appeared in exam Y = 1000 – 360 = 640

60. (d); Students appeared in exam X or in exam Z
= 180 + 60 + 40 + 80 + 200 + 120
= 680

61. (d); Number of tigers in National Park B and C together in 2018 = 52 + 32 = 84
Number of tigers in National Park A and D together in 1998
= 64+80 = 144
Required difference = 144-84 = 60

62. (b); Number of tigers in National Park D in 1998 and 2018 together = 80 + 48 = 128
Number of tigers in National Park C in 1998 and 2018 together = 48 + 32 = 80
Required % = $\frac{128}{80} \times 100 = 160\%$

63. (a); Required Ratio = $\frac{36}{40} = \frac{9}{10}$

64. (e); Number of tigers in National Park E in 2018 = $\frac{140}{100} \times 80 = 112$
Number of tigers in National Park E in 1998 = $\frac{75}{100} \times 32 = 24$
Number of tigers in National Park E in 1998 and 2018 together
= 112 + 24 = 136

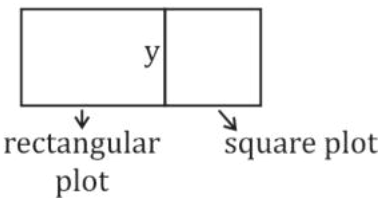
65. (b); Total number of tigers in 2018
= 36 + 52 + 32 + 48 = 168
Total number of tigers in 1998
= 64 + 40 + 48 + 80 = 232
Required difference = $\frac{232}{4} - \frac{168}{4}$
$= \frac{64}{4} = 16$

66. (a); Let the speed of boat in still water be x km/hr and that of stream be y km/hr
ATQ,
(x + y) – (x – y) = 6
⇒ 2y = 6 ⇒ y = 3 km/hr
Downstream stream = (x + y) = $\frac{72}{4}$ = 18 km/hr
⇒ x = 15 km/hr

67. (d); Let the initial quantity of mixture in vessel be x lit
ATQ,
$\frac{x \times \frac{5}{14} - 10}{x \times \frac{9}{14} - 18 + 2} = \frac{1}{2}$
$\Rightarrow \frac{5x - 140}{9x - 224} = \frac{1}{2}$
⇒ 10x – 280 = 9x – 224
⇒ x = 56 lit

68. (b); Weight of new student = 6 × (25.8 + 3.9) – 5 × 25.8
≈ 49 kg

69. (c);



Let the breadth of rectangular plot be y m and length = 15 m
ATQ,
30 + y + 3y = 390/5
⇒ 30 + 4y = 78
⇒ 4y = 48 ⇒ y = 12 m

70. (a); Let the CP be Rs. 100x
Then, MP = Rs. 150x
SP = 150x × $\frac{80}{100}$ = Rs. 120x
Profits = Rs. 20x
New MP = Rs. 175x
New SP = 175x × $\frac{80}{100}$ = Rs. 140x
New Profit = Rs. 40x
Required % = $\frac{20x}{40x} \times 100 = 50\%$

71. (d); Let the amount be Rs. x
CI at 10% in 2 years = 10 + 10 + $\frac{10 \times 10}{100}$
= 21%.
ATQ,
$\frac{x \times 21}{100} = 1050 \Rightarrow$ x = Rs. 5000
And,
$\frac{5000 \times 8 \times T}{100} = 2000$
⇒ T = 5 years.

72. (e); Let the monthly salary be Rs. 100 x.
EMI per month
$= 100x - \left(20x + 80x \times \frac{1}{4} + 80x \times \frac{1}{2}\right)$ = Rs. 20x
ATQ,
20x × 12 = 60,000
⇒ x = 250
Monthly Salary = Rs. 25,000

73. (b); ATQ,
4x + x – 9.75 = 442
5x = 451.75
x = Rs. 90

74. (a); Let the investment of B be Rs. x
∴ investment of A = Rs 2x
Ratio of profit,

A	:	B	:	C
$12 \times 2x$	:	$12 \times x$	:	$8 \times y$

ATQ,
24x = 8y
y = 3x
∴ Required percentage = $\frac{12 \times x}{8 \times 3x} \times 100$
= 50%

75. (b); Let present age of Ishu & Ahana be x year & y year respectively

∴ ATQ,

$\frac{x+8}{y+6}=\frac{5}{6}$

6x + 48 = 5y + 30

6x – 5y = – 18 ... (i)

x + 10 = y + 6

x – y = – 4 ... (ii)

∴ x = 2 years

∴ present age of Ishu is 2 years.

76. (c); quired difference = $\frac{20}{100}(P+5000)-\frac{20}{100}\times P$

= 1000

77. (d); Let diameter of base be 2x cm & height of cylinder be 3x cm

∴ radius = $\frac{2x}{2}=x$ cm

We know,

Volume of cylinder = $\pi r^2 h$ (r→ radius, h → height)

ATQ,

$\pi r^2 h$ = 3234

$\frac{22}{7}\times x^2\times 3x=3234$

x = 7cm

Radius = 7cm

78. (e); Speed of train in m/s. = 72 × $\frac{5}{18}$ = 20 m/s

Let length of train be x m

ATQ,

$\frac{524+x}{55}=20$

x = 1100 – 524 = 576m

79. (b); Lets efficiency of A is x unit/day and B's efficiency is 3x unit/day

So, B work for 19 days and A work for 18 days

ATQ—

Total work = 19 × 3x + 18 × x = 75x

$Efficiency\ of\ C=\frac{75x}{50}$

$=1.5x\ unit/day$

$(A+C)\ together=\frac{75x}{(x+1.5x)}$

$=30\ days$

80. (d); One day work of women = half of work done by men in one day

Let efficiency of one women = w unit/day

Man's efficiency = 2w unit/day

Total work = (7 × 2w + 6 × w) × 8 =160w unit

8 men and 4 women start work for 3 days

Total work done = (8 × 2w + 4 × w) × 3

= 60w

4 women replace 4 man

= (4 × 2w + 8 × w) =16w

Days required = $\frac{100w}{16w}$= 6.25 days

Mock 33

IBPS RRB PO Prelims 2017

REASONING ABILITY

1. What should come in place of question mark (?) in the following series based on the above arrangement?
ZN XD UG QK ?
(a) LK (b) LO
(c) LP (d) KP
(e) Other than the given options

2. How many such pair of numbers are there in the given number "46579739" (Both backward and forward) same as far as according to numeric series?
(a) One (b) Two
(c) Three (d) More than three
(e) None of these.

3. If it is possible to make only one meaningful word with the 1st ,2nd ,4th and 7th letters of the word '**ECUADOR**' which would be the second letter of the word from the right? If more than one such word can be formed give 'Y' as the answer. If no such word can be formed, give 'Z' as your answer.
(a) Y (b) E (c) I
(d) Z (e) M

4. If 1 is subtracted from each odd number and 2 is added to each even in the number **9436527,** then how many digits will appear twice in the new number thus formed?
(a) Only 8 (b) Only 8 and 6 (c) 8, 6 and 4
(d) 2, 4 and 6 (e) None of these

5. How many letter will be remain the same position in the word 'MONSTER' when they arranged in the ascending order from left to right?
(a) One (b) Two (c) Three
(d) More than Three (e) None

Directions (6-10): Read the following information carefully and answer the following questions.
Eight boxes A, B, C, D, E, F, G and H are place one above the other in any particular order. Box no. 1 is at the bottom and box no. 8 is at the top. Three boxes are placed between A and B. Box H is placed immediately below A. There are two boxes between H and G. There are as many boxes between C and D as between H and B. Box C is kept above D. Box E is kept immediately below box D. Three boxes are there between E and F.

6. How many boxes are there above box D?
(a) 4 (b) 3 (c) 6
(d) 2 (e) None of these

7. Which of the following boxes is kept at the top?
(a) B (b) A (c) D
(d) E (e) None of these

8. Choose the odd one out?
(a) B (b) G (c) A
(d) D (e) E

9. Which of the following boxes is kept between F and A?
(a) B (b) G
(c) C (d) H
(e) None as box F is immediately above box A

10. How many boxes are there between C and A
(a) Less than 2 (b) 4 (c) 5
(d) 6 (e) None of these

Directions (11-15): In these questions, relationships between different elements are shown in the statements. These statements are followed by two conclusions. Give answer
(a) if only conclusion I follows
(b) if only conclusion II follows
(c) if either conclusion I or conclusion II follows
(d) if neither conclusion I nor conclusion II follows
(e) if both conclusions I and II follow

11. Statement: R ≥ S ≥ T > U > X; T < V < W
Conclusions: **I.** R > X **II.** X < W

12. Statement: E = F < G < H; G ≥ I
Conclusions: **I.** H > I **II.** E > I

13. Statement: A > B > F > C; D > E > C
Conclusions: **I.** C < A **II.** B > D

14. Statement: K ≤ L ≤ M = N; P ≥ O ≥ N
Conclusions: **I.** K < P **II.** K = P

15. Statement: D < E < F < G; K > F
Conclusions: **I.** K ≤ G **II.** K > D

Directions (16-20): Read the following information carefully and answer the following questions.
Seven persons A, B, C, D, E, F and G were born on different months viz. January, February, March, April, June, August and October of the same year, but not necessarily in the same order.
Only three persons were born before E and D is not one of them. F was not born immediately after E. B was born after F. A was born immediately before the month in which G was born. Only two persons were born between G and F.

16. How many persons were born between C and E?
(a) Three (b) Two (c) Four
(d) Five (e) None of these

17. Who amongst the following is the oldest?
(a) A (b) C (c) E
(d) B (e) F

18. Who amongst the following was born between the months in which A and D were born?
(a) E (b) G (c) C
(d) B (e) Both E and G

19. How many persons were born after D?
(a) One (b) Three (c) Four
(d) Two (e) None of these

20. Who amongst the following is the person who was born in the month which has less than 30 days?
(a) F (b) B (c) G
(d) C (e) A

Directions (21-25): Study the following information carefully and answer the given questions:
In a certain code language
'card win team time' is written as 'la ta ja sa'
'fight game play card' is written as 'ja pa ra da'
'in win team fight' is written as 'da ta fa la'.

21. What is the code for 'time'?
(a) sa (b) da (c) ja
(d) la (e) None of these

22. 'card fight in' can be coded as?
(a) sa ja ra (b) fa ja da
(c) da ra ta (d) Can't be determined
(e) None of these

23. What is the code for 'game'?
(a) ra
(b) pa
(c) Either ra or pa
(d) da
(e) None of these

24. Which of the following is the code for 'in'?
(a) ta (b) da (c) la
(d) fa (e) None of these

25. If 'game in risk' is coded as 'Pa fa xa' than what will be the code for 'risk card fight'?
(a) Ja sa da (b) ja da ra (c) sa da fa
(d) xa ja da (e) None of these

Directions (26-30): Study the following information to answer the given questions
Twelve people are sitting in a two parallel rows containing six people each in such a way that there is an equal distance between adjacent persons. In row 1 – A, B, P, Q, X and Y are seated (but not necessarily in the same order) and all of them are facing south. In row 2 – E ,F ,R ,Z ,S and U are seated (but not necessarily in the same order) and all of them are facing North. Therefore in the given seating arrangement each member seated in a row faces another member of the other row. Q sits fourth to the left of A. The one facing A sits third to the left of S. Only one person sits between S and E. E does not sit at any of the extreme ends of the line The one facing U sits second to the right of B. U does not sit at any of the extreme ends of the line. Only two people sit between B and Y. The one facing B sits second to the left of Z. F is not an immediate neighbour of U. P is not immediate neighbour of Q.

26. Which of the following groups of people represents the people sitting at extreme ends of both the rows?
(a) Q, Y, Z, R (b) F, Y, F, B (c) S, Y, Z, R
(d) Q, F, Z, B (e) Q, Y, Z, S

27. Who amongst the following faces, F?
(a) Q (b) P (c) A
(d) X (e) B

28. Which of the following is true with respect to the given information?
(a) B faces one of the immediate neighbours of Z.
(b) F sits exactly between R and E.
(c) None of the given options is true
(d) A is an immediate neighbour of B
(e) A faces U.

29. Which of the following is true regarding X?
(a) B sits second to the right of X.
(b) F is an immediate neighbor of the person who faces X
(c) Both P and Y are immediate neighbours of X
(d) Only one person sits between X and A
(e) None of the given options is true

30. Who amongst the following sits second to the right of the person who faces P?
(a) F (b) U (c) R
(d) E (e) S

Directions (31-35): Study the following information carefully and answer the questions given below:

Eight friends M, N, O, P, Q, R, S and T are sitting around a circular table with equal distance between them but not necessarily in the same order. Some of them are facing the centre with some face outside (i.e. opposite to centre).

O sits second to the right of R, R faces the centre. Only two people sit between O and N (either form O's right or O's left). S sits second to the right of O. T sits to the immediate right of N. S and N face opposite direction (i.e. if N faces the centre then S faces outside and vice versa). Immediate neighbor of S face the same direction (i.e. If one neighbor faces the centre then the other also faces the centre and vice-versa) Only three people sit between P and Q. Neither P nor M is an immediate neighbor of R. Q sits second to the right of M. Both T and Q face a direction opposite to that of O (i.e. if O faces the centre then both T and Q faces outside and vice-versa).

31. Who sits exactly between M and P?
(a) N (b) S (c) R
(d) Q (e) None of these

32. How many people in the given arrangement face the centre?
(a) One (b) Three (c) Five
(d) Four (e) None of these

33. Who sits second to the right of T?
(a) O (b) Q
(c) S (d) R
(e) Other than the given options

34. Four of the following five are alike in a certain way based on the given seating arrangement and so form a group. Which is the one that does not belong to that group?
(a) P (b) O (c) T
(d) M (e) Q

35. What is P's position with respect to R?
(a) Second to the left (b) Third to the right
(c) Third to the left (d) Sixth to the right
(e) Second to the right

Directions (36–40): In each question below are given some statements followed by two conclusions numbered I and II. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements, disregarding commonly known facts.

Give answer
(a) If only conclusion I follows.
(b) If only conclusion II follows.
(c) If either conclusion I or II follows.
(d) If neither conclusion I nor II follows.
(e) If both conclusions I and II follow.

36. Statements: All bags are purses.
No purse is black.
All blacks are covers.
Conclusions: **I.** All bags are covers
II. Some covers are purses.

37. Statements: Some cats are rats.
Some rats are fishes.
All fishes are birds.
Conclusions: **I.** Some fishes are rats.
II. All cats being birds is a possibility

38. Statements: Some flowers are roses.
No rose is red.
All red are leaves.
Conclusions: **I.** Some flowers are definitely not red.
II. Some leaves are definitely not roses.

39. Statements: All cards are sheets.
All files are cards.
Some sheets are papers.
Conclusions: **I.** All files being papers is a possibility.
II. All files are not sheets.

40. Statements: Some flowers are roses.
No rose is red.
All red are leaves.
Conclusions: **I.** Some flowers are not leaves.
II. No leave is a red.

QUANTITATIVE APTITUDE

Directions (41-45): What should come in place of the question mark (?) in following number series problems?

41. 190, 94, 46, 22, ?, 4
(a) 12 (b) 14 (c) 10
(d) 8 (e) None of these

42. 5, 28, 47, 64, 77, ?
(a) 84 (b) 86 (c) 89
(d) 88 (e) None of these

43. 7, 4, 5, 12, 52, ?
(a) 424 (b) 428 (c) 318
(d) 440 (e) None of these

44. 6, 4, 5, 11, 39, ?
(a)159 (b) 169 (c) 189
(d)198 (e) None of these

45. 89, 88, 85, 78, 63, ?
(a) 30 (b) 34 (c) 36
(d) 32 (e) None of these

46. There are 3 consecutive odd numbers and 3 consecutive even numbers. The smallest even number is 9 more than largest odd number. If the square of average of all the 3 given odd number is 507 less than the square of the average of all the 3 given even number, what is the smallest odd number.
(a) 11 (b) 13 (c) 17
(d) 19 (e) 9

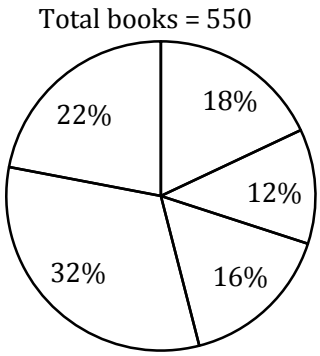
47. A can complete a task in 15 days B is 50% more efficient than A. Both A and B started working together on the task and after few days B left task and A finished the remaining $\frac{1}{3}$ of the given work. For how many days A and B worked together.
(a) 3 (b) 5 (c) 4
(d) 6 (e) 2

48. A boat can travel 9.6 km downstream in 36 min. If speed of the water current is 10% of the speed of the boat in downstream. How much time will boat take to travel 19.2 km upstream.
(a) 2 hours (b) 3 hours (c) 1.25 hours
(d) 1.5 hours (e) 1 hour

49. A started a business with a initial investment of Rs. 1200. 'X' month after the start of business, B joined A with on initial investment of Rs. 1500. If total profit was 1950 at the end of year and B's share of profit was 750. Find 'X'
(a) 5 month (b) 6 month (c) 7 month
(d) 8 month (e) 9 month

50. Ratio between curved surface area and total surface area of a circular cylinder is 3 : 5. If curved surface area is 1848 cm^3 then what is the height of cylinder.
(a) 28 (b) 14 (c) 17
(d) 21 (e) 7

Directions (51-55): Given below is the pie chart which shows the percentage distribution of a book 'XYZ' publishes in 5 different stores.



51. If number of female who bought the books in store E are 21 more than number of males who bought books from same store then find the number of females who bought book in store E.
(a) 75 (b) 78 (c) 71
(d) 68 (e) 73

52. Find the central angle for the book D.
(a) 117.5° (b) 115.2° (c) 112.8°
(d) 108.5° (e) 118.8°

53. If total books of another publisher 'MNP' is 20% more than books of 'XYZ' publisher then what will be total books sold by store A and B for publisher 'MNP'. Percentage-distribution for different stores for MNP remains same as for 'XYZ'
(a) 200 (b) 178 (c) 181
(d) 186 (e) 198

54. What is the ratio of total books sold by store A and C together to the total books sold by store D and E together
(a) 17 : 27 (b) 18 : 29 (c) 21 : 28
(d) 22 : 23 (e) 24 : 29

55. What is the difference between average of book sold by store A and E together and average books sold by store C and D together?
(a) 33 (b) 11 (c) 22
(d) 44 (e) 20

Directions (56-60): In each of these questions, two **equ**ations (I) and (II) are given. You have to solve **both** the equations and give answer
(a) if x>y (b) if x≥y
(c) if x<y (d) if x ≤y
(e) if x = y or no relationship can be established.

56. I. $x^2 + 9x + 20 = 0$ **II.** $y^2 = 16$

57. I. $x^2 - 7x + 12 = 0$ **II.** $3y^2 - 11y + 10 = 0$

58. I. $x^2 - 8x + 15 = 0$ **II.** $y^2 - 12y + 36 = 0$

59. I. $2x^2 + 9x + 7 = 0$ **II.** $y^2 + 4y + 4 = 0$

60. I. $2x^2 + 15x + 28 = 0$ **II.** $2y^2 + 13y + 21 = 0$

61. Train A completely crosses train B which is 205 m long in 16 second. If they are travelling in opposite direction and sum of speed of both are 25 m/s. then find the difference (in meter) between lengths of both trains.
(a) 5 (b) 6 (c) 8
(d) 10 (e) 12

62. A trader mixes 14 kg rice of variety A which costs Rs. 60/kg with 18 kg of quantity of type B rice. He sells the mixture at Rs. 65/Kg and earns a profit of $\frac{100}{3}$%. Then what was the cost price of type B rice.
(a) 30 (b) 20 (c) 40
(d) 50 (e) 45

63. Present age of A is 3 years less than present age of B. Ratio of B's age 5 year ago and A's age 4 year hence is 3 : 4 then find present age (in years) of A.
(a) 20 (b) 17 (c) 23
(d) 26 (e) 29

64. A bag contains 6 Red, 5 Green and 4 Yellow coloured balls. 2 balls are drawn at random after one another without replacement then what is the probability that atleat one ball is Green.
(a) $\frac{2}{3}$ (b) $\frac{4}{5}$ (c) $\frac{3}{8}$
(d) $\frac{4}{7}$ (e) $\frac{2}{7}$

65. Cost price of B is 200 more than cost price of A. B is sold at 10% profit and A is sold at 40% loss and selling price of A and B are in the ratio 4 : 11. If A is sold at 20% loss then what will be selling price of A.
(a) 320 (b) 400 (c) 240
(d) 160 (e) 360

Directions (66-70): Read the following table carefully and answer the following questions—
No. of students and % of students passed out of those who appeared are given for two subjects from year 2001 to 2005 in a college XYZ.

Year	Statistics		Economics	
	No. of students appeared	% of students passed	No. of students appeared	% of students passed
2001	2200	45%	4200	40%
2002	2700	55%	3800	45%
2003	2500	35%	2600	60%
2004	3200	65%	4800	55%
2005	4800	60%	2200	50%

66. Find the average number of students who were failed in Economics in year 2002 and year 2003 together?
(a) 1435 (b) 1565 (c) 1720
(d) 1590 (e) None of these

67. Number of students failed in Statistics in the year 2003 is what % of the number of students failed in Economics in the same year?
(a) 145.75% (b) 150% (c) 156.25%
(d) 158.25% (e) None of these

68. Find the ratio between the total number of students appeared in Economics from 2002 to 2004 together and the total number of students appeared in Statistics from year 2003 to 2005 together?
(a) 13 : 14 (b) 14 : 13 (c) 15 : 16
(d) 16 : 15 (e) None of these

69. Find the difference between the total number of students passed in Statistics from year 2002 and total number of students failed in Economics from year 2005.
(a) 690 (b) 385 (c) 485
(d) 550 (e) 610

70. Find the average number of students appeared in Economics from year 2001 to 2004 together?
(a) 3090 (b) 3015 (c) 3060
(d) 3075 (e) 3850

Direction (71-75): What approximate value should come in place of question mark (?) in the following questions? (Note: You are not expected to calculate the exact value)

71. ? % of (5284.89 ÷ 7.08) = 986.01 – 533. 06
(a) 42 (b) 39 (c) 74
(d) 65 (e) 60

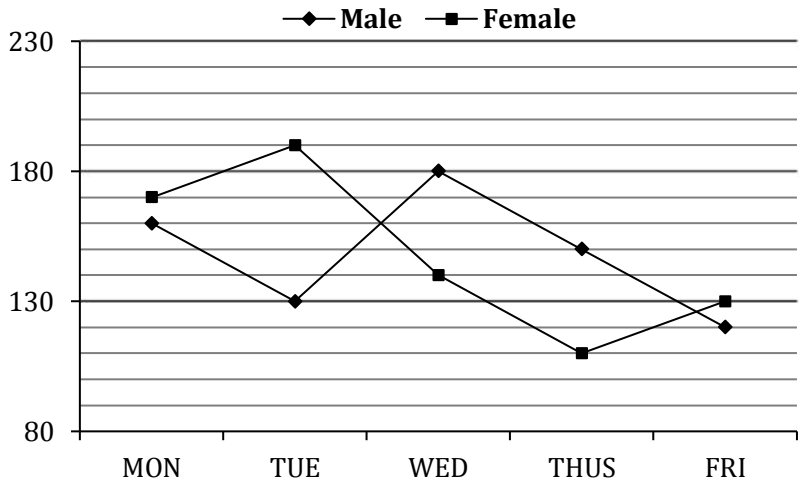
72. (1041.84 + ?) ÷ 3.02 = 1816.25 ÷ 4.01
(a) 442 (b) 337 (c) 385
(d) 268 (e) 320

73. 69.3% of 445.12 ÷ 14.06 = 623.08 ÷ ?
(a) 28 (b) 19 (c) 21
(d) 33 (e) 37

74. $?^2$ + 114.09 – 24.06 × 5.14 = 163.19
(a) 7 (b) 13 (c) 11
(d) 15 (e) 19

75. 768.16 ÷ 11.87 × $\sqrt{257}$ – 58.05 = ?
(a) 1033 (b) 1175 (c) 966
(d) 880 (e) 975

Directions (76-80): Study the following line graph carefully and answer the following questions.
Number of males and number of females are given. They are visiting a place from Monday to Friday.



76. Find the ratio of the total number of males visited the place on Tuesday and Thursday together to the total number of females visited the place on Monday and Friday together?
(a) 29 : 30 (b) 30 : 29 (c) 25 : 26
(d) 26 : 25 (e) None of these

77. Total number of males and females together visited the place on Tuesday are what percent more/less than the total number of male and females together visited the place on Thursday ?
(a) $26\frac{12}{13}\%$ (b) $25\frac{3}{13}\%$ (c) $26\frac{3}{13}\%$
(d) $25\frac{7}{13}\%$ (e) None of these

78. Find the difference between the total number of females visited the place from Monday to Wednesday and the total number of males visited the place from Wednesday to Friday?
(a) 30 (b) 60 (c) 40
(d) 50 (e) None of these

79. If on Saturday the number of males and number of females increased by 25% and 20% respectively as compared to that on Friday then find the total number of males and females together visited the place on Saturday?
(a) 196 (b) 306 (c) 316
(d) 206 (e) 216

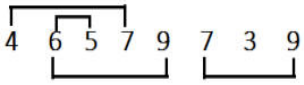
80. Total number of males and females visited the place on Monday and Tuesday together is how much more than the total number of males and females visited the place on Thursday and Friday together?
(a) 175 (b) 125 (c) 150
(d) 160 (e)130

Solutions

REASONING ABILITY

1. (c); LP

2. (d);



3. (a); Race, Care

4. (c);

9 4 3 6 5 2 7

8 6 2 8 4 4 6

5. (a);

M O N S T E R

E M N O R S T

Directions (6-10):

Number	Box
8	B
7	C
6	G
5	F
4	A
3	H
2	D
1	E

6. (c); **7. (a);** **8. (e);**
9. (e); **10. (e);**

Directions (11-15):
11. (e); Both conclusion I and II follow.

12. (a); Only conclusion I follows.

13. (a); Only conclusion I follows.

14. (c); Either conclusion I or II follows.

15. (b); Only conclusion II follows.

Directions (16-20):

Month	Person
January	C
February	A
March	G
April	E
June	D
August	F
October	B

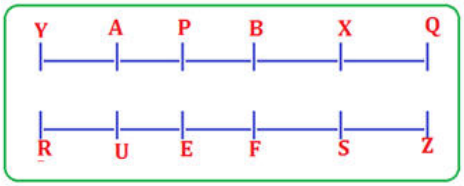
16. (b); **17. (b);** **18. (e);**
19. (d); **20. (e);**

Directions (21-25):

Word	Code
Card	ja
Time	sa
Win/team	la/ta
Fight	da
Game/Play	pa/ra
In	fa

21. (a); **22. (b);** **23. (c);**
24. (d); **25. (d);**

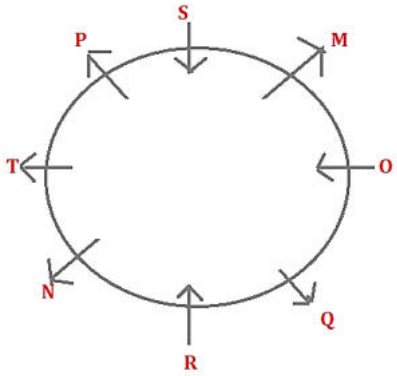
Direction (26-30):



26. (a); **27. (e);** **28. (e);**

29. (b); **30. (e);**

Direction (31-35):

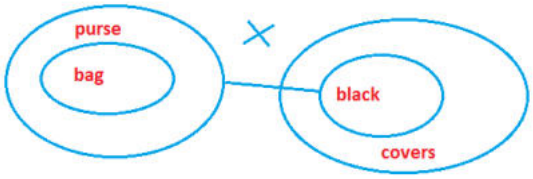


31. (b); **32. (b);** **33. (c);**

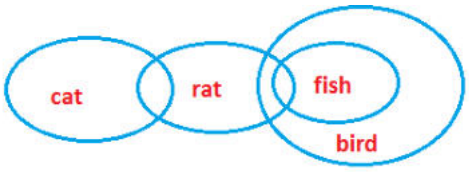
34. (b); **35. (c);**

Directions (36–40):

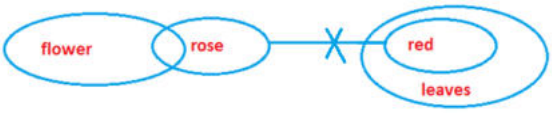
36. (d);



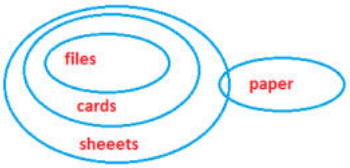
37. (e);



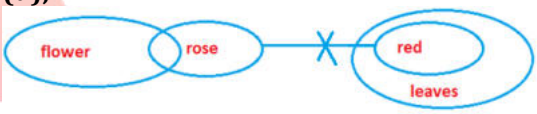
38. (e);



39. (a);



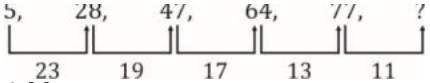
40. (d);



QUANTITATIVE APTITUDE

41. (c); Series is ÷2–1, ÷2–1
(22÷2)–1=10

42. (d);

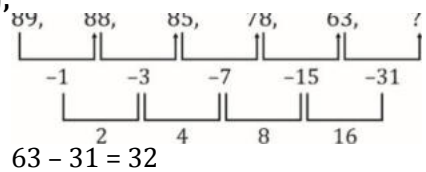


Adding prime No.
77 + 11 = 88

43. (a); (7+1) × 0.5 = 4
(4+1) × 1 = 5
(5+1) × 2 = 12
(12+1) × 4 =52
(52 +1)× 8 = 424

44. (c); (6×1)–2 = 4
(4×2)–3 = 5
(5×3) –4 = 11
(11×4) –5 = 39
(39×5) –6 = 189

45. (d);



63 – 31 = 32

46. (a); Let a consecutive odd numbers
$= x - 2,\ x$ and $x + 2$
and consecutive even numbers
$= y - 2,\ y,\ y + 2$
So, $y - 2 = 9 + x + 2$
$y - x = 13$ ... (i)
and
$(x)^2 + 507 = (y)^2$
$y^2 - x^2 = 507$
$(x + y)(y - x) = 507$
$(x + y) = \frac{507}{13} \Rightarrow x + y = 39$ ... (i)
Solving (i) and (ii) $y = 26$ and $x = 13$
so smallest odd numbers = $x - 2 = 13 - 2 = 11$

47. (c); A complete work in 15 days.
B will complete work in 10 days.
They together will complete whole work
$= \frac{15\times10}{25} = 6\ days$
A and B together worked for = $6 \times {}^{2}/_{3} = 4$ days

48. (d); $Speed\ of\ downstream = \frac{9.6}{36} km/min$
$= 16\ km/hr$
Speed of current = 1.6 km/hr
Let speed of man in still water = x
So, x = 16 – 1.6 = 14.4 km/hr
$Required\ time\ in\ upstream = \frac{19.2}{14.4-1.6}$
$= 1.5\ hours$

49. (b); Ratio of profit of A and B = 1200 : 750
= 24 : 15 = 8 : 5
So,
$\frac{1200\times12}{1500\times y} = \frac{8}{5}$
$y = 6$ months
x = 6 month

50. (d); $\frac{2\pi rh}{2\pi r(r+h)} = \frac{3}{5}$
5h = 3r + 3h
2h = 3r
and
2πrh = 1848
$2 \times \frac{22}{7} \times \frac{2}{3}h \times h = 1848$
$h = 21$

51. (c); Let male who purchased book from Store E = x
Then
$x + x + 21 = \frac{22}{100} \times 550$
$x = 50$
Required number of females = 50 + 21 = 71

52. (b); $\frac{18}{5} = \frac{x}{32}$
$x = \frac{18\times32}{5} = 18 \times 6.4 = 115.2$

53. (e); $Total\ books\ of\ store\ XYZ = \frac{120}{100} \times 550$
$= 660$
Total books sold by store A and B
= (18% + 12%) of 660 = 198

54. (a); Required ratio = (18% + 16%) : (32% + 22%)
= 34 : 54 = 17 : 27

55. (c); Required difference
$= \frac{1}{2}[(32\% + 16\%) - (18\% + 22\%)]550$
$= \frac{1}{2} \times 8\%\ of\ 550 = 4\%\ of\ 550 = 22$

56. (d);
I $x^2 + 5x + 4x + 20 = 0$
$x(x + 5) + 4(x + 5) = 0$
$(x + 4)(x + 5) = 0$
$x = -4, -5$
II. $y^2 = 16$
$y = \pm4$
$\therefore x \leq y$

57. (a);
I. $x^2 - 7x + 12 = 0$
$x^2 - 4x - 3x + 12 = 0$
$x(x - 4) - 3(x - 4) = 0$
$(x - 3)(x - 4) = 0$
$x = 3, 4$
II. $3y^2 - 11y + 10 = 0$
$3y^2 - 6y - 5y + 10 = 0$
$3y(y - 2) - 5(y - 2) = 0$
$(3y - 5)(y - 2) = 0$
$y = 2, \frac{5}{3}$
$\therefore x > y$

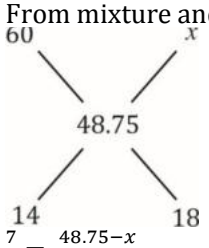
58. (c);
I. $x^2 - 8x + 15 = 0$
$x^2 - 3x - 5x + 15 = 0$
$x(x - 3) - 5(x - 3) = 0$
$(x - 3)(x - 5) = 0$
$x = 3, 5$
II. $y^2 - 12y + 36 = 0$
$y^2 - 6y - 6y + 36 = 0$
$y(y - 6) - 6(y - 6) = 0$
$(y - 6)(y - 6) = 0$
$y = 6$
$\therefore x < y$

59. (e);
I. $2x^2 + 9x + 7 = 0$
$2x^2 + 7x + 2x + 7 = 0$
$x(2x + 7) + 1(2x + 7) = 0$
$(x + 1)(2x + 7) = 0$
$x = -1, -\frac{7}{2}$
II. $y^2 + 4y + 4 = 0$
$y^2 + 2y + 2y + 4 = 0$
$y(y + 2) + 2(y + 2) = 0$
$(y + 2)(y + 2) = 0$
$y = -2, -2$
$\therefore$ No relation.

60. (d);
I. $2x^2 + 15x + 28 = 0$
$2x^2 + 8x + 7x + 28 = 0$
$2x(x + 4) + 7(x + 4) = 0$
$(2x + 7)(x + 4) = 0$
$x = \left(-\frac{7}{2}\right), -4$
II. $2y^2 + 13y + 21 = 0$
$2y^2 + 7y + 6y + 21 = 0$
$y(2y + 7) + 3(2y + 7) = 0$
$(y + 3)(2y + 7) = 0$
$y = -3, \frac{-7}{2}$
$x \leq y$

61. (d); In 16 second distance covered by both
= 16 × 25 = 400 m
So length of A = 400 – 205 = 195
Required difference = 10 m

62. (c); Let cost price of mixture = y
$So, \frac{4}{3}y = 65$
$y = 48.75$
From mixture and allegation



$\frac{7}{9} = \frac{48.75-x}{60-48.75}$
$78.75 = 438.75 - 9x$
$360 = 9x$
$x = 40$ Rs./kg

63. (a); Let B's age = x
So A's age = $x - 3$
$\frac{x-5}{x+1} = \frac{3}{4}$
$x = 23$
A's age = $23-3 = 20\ years$

64. (d); Probability that no ball is green
$\frac{^{10}C_1 \times ^{9}C_1}{15\times14} = \frac{90}{15\times14} = \frac{3}{7}$
Required probability $= 1 - \frac{3}{7} = \frac{4}{7}$

65. (a); Let C.P. of A = x
So C.P. of B = $200 + x$
According to question
$\frac{\frac{110}{100}(x+200)}{\frac{60}{100}x} = \frac{11}{4} \Rightarrow \frac{x+200}{6x} = \frac{1}{4}$
$x = 400$
If it is sold at 20% loss then selling price
$= \frac{80}{100} \times 400 = 320$

66. (b); No. of students failed in Economics in year 2002
$= \frac{(100-45)}{100} \times 3800 = 2090$
No. of students failed in Economics in year 2003
$= \frac{(100-60)}{100} \times 2600 = 1040$
$Required\ average = \frac{2090+1040}{2} = 1565$
$Short\ trick = \frac{55\times38+40\times26}{2} = 1565$

67. (c); No. of students failed in Statistics in year 2003
$= \frac{100-35}{100} \times 2500 = 1625$
No. of students failed in Economics in year 2003
$= \frac{100-60}{100} \times 2600 = 1040$
$Required\ \% = \frac{1625}{1040} \times 100 = 156.25\%$
$Short\ trick = \frac{65\times25}{40\times26} \times 100 = 156.25\%$

68. (d); Total no. of students appeared in Economics from 2002 to 2004
= 3800 + 2600 + 4800 = 11200
Total no. of students appeared in Statistics from 2003 to 2005
= 2500 + 3200 + 4800 = 10500
Required ratio = 11,200 : 10,500 = 16 : 15

69. (b); Total no. of students passed in Statistics in year 2002
$= \frac{55}{100} \times 2700 = 1485$
Total no. of students failed in Economics in year 2005
$= \frac{50}{100} \times 2200 = 1100$
Required difference = 1485 – 1100 = 385
Short trick = 55 × 27 – 50 × 22 = 385

70. (e); Average no. of students appeared in Economics from year 2001 to 2004 together
$= \frac{4200+3800+2600+4800}{4} = \frac{15400}{4} = 3850$

71. (e); $\frac{?}{100} \times 750 = 450 \Rightarrow ? \approx 60$

72. (e); $\frac{(1042+?)}{3.02} = 454 \Rightarrow ? = 320$

73. (a); $\frac{310}{14} = \frac{625}{?} \Rightarrow ? \approx 28$

74. (b); $?^2 = 170 \Rightarrow ? \approx 13$

75. (c); $\approx 64 \times 16 - 58 \approx 966$

76. (a); Total no. of males visited on Tuesday and Thursday = 140 + 150 = 290
Total no. of females visited on Monday and Friday = 170 + 130 = 300
Required ratio = 290: 300 = 29: 30

77. (a); Total no. of males and females together on Tuesday = 140 + 190 = 330
Total no. of males and females together on Thursday = 150 + 110 = 260
$Required\ \% = \frac{330-260}{260} \times 100 = 26\frac{12}{13}\%$

78. (d); Total no. of females visited from Monday to Wednesday = 170 + 190 + 140 = 500
Total no. of males visited from Wednesday to Friday = 180 + 150 + 120 = 450
Required difference = 500 – 450 = 50

79. (b); On Saturday —
Total no. of males visited the place
$= \frac{125}{100} \times 120 = 150$
Total no. of females visited the place
$= \frac{120}{100} \times 130 = 156$
Required males and females
= 150 + 156 = 306

80. (c); Total males and females visited the place on Monday and Tuesday together
= 160 + 140 + 170 + 190 = 660
Total males and females visited the place on Thursday and Friday together
= 150 + 120 + 110 + 130 = 510
Required no. of persons = 660 – 510 = 150

Mock 34

IBPS RRB PO Prelims 2016

REASONING ABILITY

Directions: (1–5): In these questions, a relationship between different elements is shown in the statements(s). The statements are followed by two conclusions. Give answer
(a) if only conclusion I is true.
(b) if only conclusion II is true.
(c) if either conclusion I or II is true.
(d) if neither conclusion I nor II is true.
(d) if both conclusions I and II are true.

1. Statements : A > B ≥ C < D, C = E > G
Conclusions : I. D > E **II.** B > E

2. Statements : P ≤ Q > M ≥ N, Q = S
Conclusions : I. S > P **II.** N < S

3. Statements : S > M = Z > T < Q > V
Conclusions : I. V = S **II.** Q > M

4. Statements : T < U = V ≤ S > P ≥ Q
Conclusions : I. S > T **II.** V ≥ Q

5. Statements : M ≥ N > R > W, E = J > L ≥ W
Conclusions : I. E > W **II.** M > L

Directions (6-10): In each of the question-sets below are three statements followed by two conclusions numbered I and II. You have to take the given statements to be true even if they seem to be at variance with commonly known facts and then decide which of the given conclusions logically follows from the given statements, disregarding commonly known facts. Given answer.
(a) If only conclusions I follows.
(b) if only conclusion II follows.
(c) if either conclusions I or conclusion II follows.
(d) if neither conclusion I nor conclusion II follows.
(e) if both conclusion I and conclusion II follow.

6. Statements: All pencils are Cutter
Some Cutter are Scale.
No Scale is a campass.
Conclusions:
I. All pencils being Scale is a possibility.
II. No campass is a Cutter.

7. Statements: Some circles are triangles.
All triangles are squares.
No square is a rectangle.
Conclusions:
I. Some triangles being rectangles is a possibility.
II. All squares being circles is a possibility.

8. Statements: All pencils are Cutter
Some Cutter are Scale.
No Scale is a compass.
Conclusions:
I. All compass being pencils is a possibility.
II. At least some Cutters are pencils.

9. Statements: Some wallets are bags.
Some bags are leather.
All purses are leather.
Conclusions: **I.** some purse are bags.
II. Some purse are wallet.

10. Statements: Some circles are triangles.
All triangles are squares.
No square is a rectangle.
Conclusions:
I. No rectangle is a triangle.
II. Some circles are not rectangles.

Directions (11-15): Study the following information to answer the given questions
Eight students M, N, O, P , U, V, W and X are sitting around a square table in such a way four of them sit at four corners while four sit in the middle of each of the four sides. The one who sit at the 4 corners face the centre and others facing outside.
M who faces the centre sits third to the left of V. U who faces the centre is not an immediate neighbour of V. Only one person sits between V and W. P sits second to right of N. N faces the centre. O is not an immediate neighbour of M.

11. Which one does not belong to that group out of five?
(a)N (b)O (c)U
(d)P (e)M

12. Which will come in the place of ?
NOU UXM MWP ?
(a)PVN (b)PWM (c)POW
(d)POV (e)None of these

13. What is the position of W with respect to O ?
(a)Third to the right (b)Second to the left
(c)Second to the right (d)Fourth to the right
(e)None of these

14. Who sits third to the left of N ?
(a)X (b)M (c)W
(d)V (e)None of these

15. Which is true from the given arrangement ?
(a)W faces the centre (b)N faces outside
(c)X faces inside (d)M faces the centre
(e)None of these

Directions (16-18): Study the information carefully and answer the question given below.
M is father of A and C. R is brother of C. A is Husband of T and S is daughter of T. V is grandmother of S.

16. How is T related to M?
(a) Son in law (b) Daughter
(c) Daughter in law (d) Can't be determined
(e) None of these

17. If R has only one sister C than what is the relation of A to S?
(a) Mother (b) Father (c) Uncle
(d) Can't be determined
(e) None of these

18. How is M related to S?
(a) Father (b) Father in law
(c) Grandfather (d) Granddaughter
(e) None of these.

Directions (19-23): Study the following information carefully to answer the given questions:
Eight friends P, Q, R, S, T, U, V and W are seated in a straight line facing north, but not necessarily in the same order.

- Q sits second to right of U. U sits at one of the extreme ends of the line.
- Only three persons sit between Q and T.
- R sit third to the left of S. Only two persons sit between S and P.
- V is not an immediate neighbor of T.

19. Who among the following represents the person seated at the extreme right of the line?
(a) V (b) W (c)U
(d) R (e) P

20. Who among the following sit exactly between S and P?
(a) U, P (b) Q, U (c) U, V
(d) T, W (e) Q, T

21. What is the position of V with respect to T?
(a) Third to the left (b) Second to the right
(c) Fourth to the right (d) Third to the right
(e) Second to the left

22. Based on the given arrangement, which of the following is true with respect to W?
(a) Only two persons sit between W and R.
(b) Only two persons sit to the right of W.
(c) None of the given options is true.
(d) Both R and P are immediate neighbors of W.
(e) V sits on the immediate right of W.

23. How many persons are seated between V and P?
(a) None (b) One (c) Two
(d) Four (e) Three

24. In a certain code language SERIES is written as QCGTGU. How is EXPERT written in that code language?
(a) VTGRZG (b) RPCRZG (c) GZRCPR
(d) RPCGZR (e) None of these

25. How many such pairs of letters are there in the word COMPOSE each of which has many letters between them in the word as they have between them in the English alphabetical series?
(a) None (b) One (c) Two
(d) Three (e) None of these

Directions (26-30): Study the information carefully and answer the question given below.
Nine persons P, Q, R, S, T, U, V, W and X. they live on a separate floor each of a 9-floor building but not necessarily in the same order. The ground floor is numbered 1, the first floor is numbered 2 and so on until the topmost floor is numbered Nine.
Only two persons live below the floor on which V lives.
Only one person lives between V and P.
W lives on an odd-numbered floor but not on floor no. 7.
Only two persons live between W and Q. X does not live on the topmost floor. P does not live on the lowermost floor. S lives immediately below R but R does not sit on topmost floor. Neither R nor T live on floor no 6. U lives immediately above P.

26. How many persons live between the floors on which P and S live?
(a) Three (b) More than three
(c) None (d) Two (e) One

27. Who lives on the floor immediately below V?
(a) U (b) T (c) S
(d) Q (e) X

28. On which of the following floor numbers does X live?
(a) Four (b) One (c) Two
(d) Five (e) Seven

29. Which of the following is true with respect to U as per the given arrangement?
(a) Only three persons live between U and Q
(b) Only three persons live above U.
(c) Only one person sits between U and S.
(d) U sits on odd numbered floor.
(e) None of these.

30. Who lives on the floor numbered 5?
(a) U (b) Q (c) S
(d) P (e) None of these

Directions (31-33): Study the information carefully and answer the question given below.
Mark starts from his house and moving in the south direction and after moving 25m, he took a right turn and move 40 m to reach his uncle house. again Mark start moving southwards and after travelling 50m he took a left and travels 80 m to reach his aunt home.

31. In which direction his aunt house is located with respect to his house?
(a) south west (b) south east (c) north east
(d) north west (e) None of these

32. Uncle house in which direction with respect to aunt house?
(a) North east (b) North west (c) South west
(d) South east (e) None of these

33. If Point A is 25m. to the north of uncle's house then what is the distance between A and Mark house?
(a) 40 m. (b) 30 m. (c) 20 m.
(d) Can't be determined
(e) None of these.

Directions (34-38): Study the information carefully and answer the question given below.
Gaurav Join classes from Monday to Sunday of the same week for different subject viz. Biology, Chemistry, Physics, Hindi, - Mathematics, English and Geography.
- Hindi class taken by him on Wednesday.
- There is one day gap between Hindi class and Mathematics class.
- And there is three day gap between mathematics class and English class.
- English class is scheduled immediately before Physics class but not in Monday.
- Chemistry is scheduled immediately after mathematics class.
- There is one day gap between Chemistry class and Geography class. And biology class scheduled on Sunday.

34. How many days gap between Maths and Chemistry class?
(a) One (b) Two (c) Three
(d) Four (e) None

35. Hindi class is scheduled on which day?
(a) Monday (b) Wednesday (c) Thursday
(d) Friday (e) None of these

36. Which of the following is correct combination given below?
(a) Hindi= Monday
(b) Physics= Tuesday
(c) Chemistry= Thursday
(d) Mathematics= Monday
(e) Biology= Friday

37. On which day of the week is Chemistry class is schedule?
(a) Monday (b) Tuesday (c) Wednesday
(d) Thursday (e) None of these.

38. Four of the followings five are alike in a certain ways form a group which one does not belong to the group?
(a) Tuesday=Hindi
(b) Monday=Chemistry
(c) Friday=Physics
(d) Wednesday=Hindi
(e) Thursday=English

39. If Divyaraj finds that he is fourteenth from the left end of the row and 7th from the right end of the row, then how many boys must be added to the row such that there are 30 boys in the row?
(a) 8 (b) 10 (c) 12
(d) 14 (e) None of these

40. Find odd one out from given series-
AZD FUI HSK OLP SHV
(a) AZD (b) FUI (c) HSK
(d) OLP (e) None of these

QUANTITATIVE APTITUDE

41. Two pipes can fill a tank in 10 hours and 16 hours respectively. A third pipe can empty the tank in 32 hours. If all the three pipes are opened simultaneously then in how much time the tank will be full? (in hours)
(a) $7\frac{11}{21}$ (b) $7\frac{13}{21}$ (c) $8\frac{4}{21}$
(d) $6\frac{5}{14}$ (e) $8\frac{9}{14}$

42. a, b, c and d are four consecutive even numbers, if the sum of 'a' and 'c' is 120, what is the product of 'b' and 'd'?
(a) 4030 (b) 3780 (c) 3900
(d) 3900 (e) 3840

43. Three numbers are given. The average of first and third numbers is 24 more than that of average of second and third numbers. Find out the difference between the first and second numbers.
(a) 36 (b) 40 (c) 42
(d) 48 (e) 46

44. If 3 men or 9 boys can finish a piece of work in 21 days. In how many days can 5 men and 6 boys can complete the same piece of work?
(a) 12 days (b) 8 days (c) 14 days
(d) 10 days (e) 9 days

45. A sum of money fetches Rs 240 as simple interest at the rate of 5 p.c.p.a. after 6 years. What is the principal?
(a) Rs 200 (b) Rs 400 (c) Rs 800
(d) Rs 1,200 (e) Rs 1,000

Directions (46– 50): Study the given table carefully and answer the questions.
Table shows the total population in six different cities and the ratio of literate to illiterate population and also the percentage of graduate out of literate population in each city.

Cities	Population (in thousand)	Literate: Illiterate	Percentage Graduate out of literate
A	22	5 : 6	20%
B	16	3 : 5	35%
C	96	2 : 1	32%
D	20	2 : 3	25%
E	24	5 : 3	$33\frac{1}{3}\%$

46. Graduate population of city B and D together is approximately what percent more/less than graduate population of city A and E together?
(a) 54% (b) 50% (c) 47%
(d) 42% (e) 37%

47. Population of city C who are literate but not graduate is how much more than the average graduate population of city D and E together?
(a) 40020 (b) 4020 (c) 4200
(d) 4420 (e) 40040

48. If the ratio of illiterate male to female in city B is 3:5 and ratio of graduate male to female population in city D is 2 : 3. Then find the ratio of total illiterate male in city B and graduate female in city D?
(a) 23 : 7 (b) 8 : 25 (c) 75 : 16
(d) 21 : 8 (e) 25 : 8

49. Illiterate population of city D is what percent of the Illiterate population of city 'C'?
(a) 25% (b) 37.5% (c) 40%
(d) 50% (e) 62.5%

50. Literate population of cities A and B together is approximately what percentage of the population which are not graduate of city D?
(a) 82% (b) 72% (c) 93%
(d) 79% (e) 89%

Directions (51-55): What will come in the place of the question mark (?) in the following number series?

51. 1, 11, 59, 239, 719, ?
(a) 1438 (b) 1439 (c) 1428
(d) 1429 (e) 1419

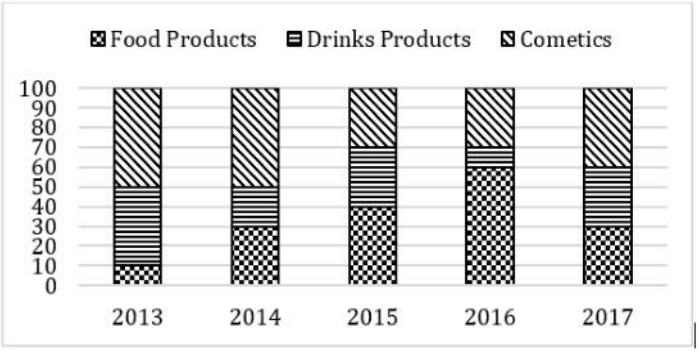
52. 18, 8, 30, 20, 42, **?**
(a) 38 (b) 36 (c) 28
(d) 32 (e) 30

53. 2880, 480, 96, ?, 8, 4
(a) 16 (b) 24 (c) 20
(d) 28 (e) 32

54. 8, 10, 20, 50, ?, 248
(a) 115 (b) 103 (c) 113
(d) 108 (e) 118

55. 8, 6, 8, 14, 30, ?
(a) 75 (b) 76 (c) 77
(d) 78 (e) 79

Directions (56-60): A Company produces three different products namely food, drinks and cosmetic products. If total production of the company was same for all years and % production of three products in particular years given below,then answer the questions that follows:



56. In 2013, number of food products produced by the company is what percent more/less than cosmetic products produced in year 2016?
(a) $33\frac{1}{3}\%$ (b) 25% (c) $66\frac{2}{3}\%$
(d) 20% (e) 50%

57. If total production in year 2017 was 1,20,000. Find the difference between number of food products produced in 2017 and drink products produced in 2014?
(a) 12000 (b) 15000 (c) 12500
(d) 10000 (e) 11500

58. Find the ratio b/w number of cosmetic products produced in 2017 and number of food products produced in 2013.
(a) 1 : 4 (b) 1 : 2 (c) 2 : 1
(d) 3 : 4 (e) 4 : 1

59. The difference b/w food products and drink products produced by the company in 2015 is 15000. Find the average of food and cosmetic products produced by company in 2013?
(a) 30000 (b) 50000 (c) 40000
(d) 45000 (e) 25000

60. Find the total production in 2018 if there is an increase of 10% in total production in 2018 as compared to previous year given that number of drink products produced in 2015 was 12000?
(a) 55000 (b) 44000 (c) 66000
(d) 33000 (e) None of these

Directions (61-65): In each of these questions, two equations I and II are given. You have to solve both the equations and give answer
(a) if $x > y$ (b) if $x \geq y$
(c) if $x < y$ (d) if $x \leq y$
(e) if $x = y$ or no relation can be established between x and y

61. **I.** $x^2 - 264 = 361$ **II.** $y^3 - 878 = 453$

62. **I.** $3x^2 + 14x + 15 = 0$ **II.** $3y^2 - 1\,3y + 14 = 0$

63. **I.** $12x^2 - 17x + 6 = 0$ **II.** $y^2 - 16y + 63 = 0$

64. **I.** $x^2 - 48x + 575 = 0$ **II.** $46y^2 - 35y - 11 = 0$

65. **I.** $15x^2 - 11x - 12 = 0$ **II.** $20y^2 - 49y + 30 = 0$

66. Three friends Satish, Bhavya and Abhi complete the work in 10 days, 15 days & 12 days respectively. They started to work together but Satish left the work after two days and Abhi left the work 1 day before the completion of the work. In how many days the whole work will be completed?
(a) $5\frac{8}{9}$ days (b) 6 days (c) $7\frac{7}{8}$ days
(d) 8 days (e) 9 days

67. $\frac{2}{3}^{rd}$ of first number is equal to the cube of the second number. If the second number is equal to 12% of 100, what is sum of the first & 2nd number?
(a) 2408 (b) 2640 (c) 2426
(d) 2604 (e) 2804

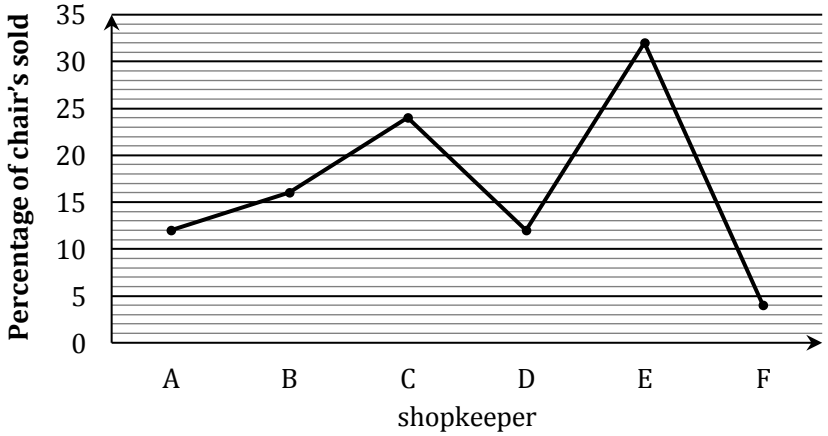
68. A wholeseller sells an item to a retailer at 20% discount, but charges 10% on the discounted price for packaging & delivery. The retailer sells it for 1023 more, thereby earning a profit of 25%. At what price had the wholeseller marked the item ?
(a) Rs. 4620 (b) Rs. 4650 (c) Rs. 4850
(d) Rs. 5240 (e) Rs. 5445

69. The present age of Bhagat and Abhi are in ratio of 9 : 8 respectively. After 10 years the ratio of their ages will be 10 : 9. What is the difference in their present age?
(a) 8 years (b) 6 years (c) 12 years
(d) 4 years (e) 10 years

70. The circumference of two circles is 132 m and 176 m respectively. What is difference between the area of larger circle and smaller circle ? (in m^2)
(a) 1052 (b) 1128 (c) 1258
(d) 1078 (e) 1528

Directions (71-75): Study the given line graph carefully and answer the questions.
Line graph shows the percentage of chair sold by six shopkeepers.

Total chair sold by all shopkeepers = 96 thousands.



71. Chairs sold by shopkeeper B and D together is how much more than chairs sold by shopkeeper A and F together ?
(a) 10420 (b) 11520 (c) 12480
(d) 11740 (e) 15220

72. Chairs sold by shopkeeper A and E together is how much percentage more than chairs sold by shopkeeper B and C together?
(a) 10% (b) 6% (c) 8%
(d) 12% (e) 14%

73. F sold only three types of chairs i.e. K, L and M in the ratio 3 : 5 : 4 .Find the difference of chairs sold by F of type K and M together and that of type L?
(a) 320 (b) 840 (c) 740
(d) 420 (e) 640

74. If there is another shopkeeper P who sells three types of chairs i.e. X, Y and Z. If chairs of type X sold is half of the total chairs sold by shopkeeper F, Chairs of type Y sold is 20% of the chairs sold by shopkeeper A and chairs of type Z sold is $\frac{2}{5}$ th of total chairs sold by shopkeeper B. Then find total number of chairs sold by Shopkeeper P?
(a) 12348 (b) 16368 (c) 12244
(d) 10368 (e) 10428

75. What is the ratio of average of chairs sold by shopkeeper B, C and D together to average of chairs sold by shopkeeper A and E together?
(a) 25 : 33 (b) 21 : 11 (c) 26 : 33
(d) 11 : 24 (e) 11 : 26

Directions (76-80): What should come in place of question mark (?) in the following questions?

76. 1528 + 525 ÷ 25 – 840 = 510 + ?
(a) 199 (b) 299 (c) 159
(d) 189 (e) 165

77. $\sqrt{1225} \div 7 + 18.5 \times 16 - 18\%$ of 10800 = ? – 1800
(a) 259 (b) 169 (c) 157
(d) 129 (e) 141

78. 65% of 180 + ?% of 210 = 80% of 225
(a) 45 (b) 30 (c) 40
(d) 50 (e) 25

79. $\sqrt{1500+?+17.5 \times 8 - 5\% \ of \ 20} = 42$
(a) 145 (b) 115 (c) 120
(d) 135 (e) 125

80. $\frac{13}{17}$ of $\frac{8}{156}$ of 153 = ?
(a) 8 (b) 12 (c) 7
(d) 6 (e) 4

Solutions

REASONING ABILITY

1. (a); $D > C = E(True) B \geq C = E(False)$

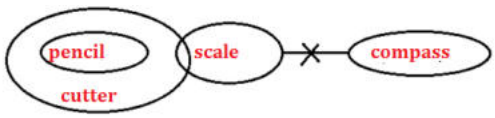
2. (b); $S = Q \geq P(False) S = Q > M \geq N(True)$

3. (d); $V = S(False) Q > M(False)$

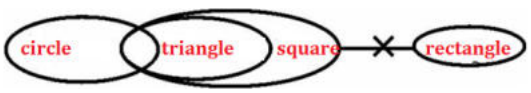
4. (a); $S \geq V = U > T(True) V \geq Q(False)$

5. (a); $E = J > L \geq W(True) M \geq N > R > W \leq L(False)$

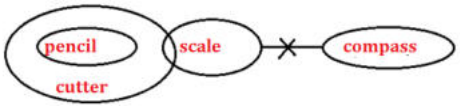
6. (a);



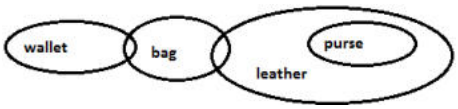
7. (b);



8. (e);

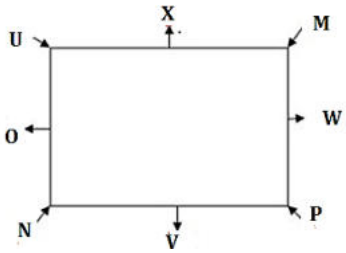


9. (d);



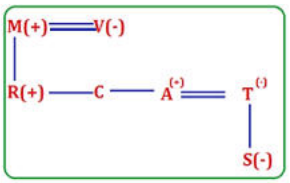
10. (e);

Direction (11-15);



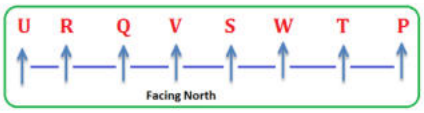
11. (b); 12. (a); 13. (d);
14. (a); 15. (d);

Direction (16-18);



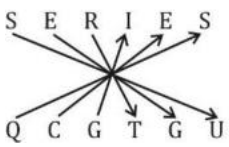
16. (c); 17. (b); 18. (c);

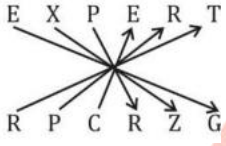
Direction (19-23);



19. (e); 20. (d); 21. (a);
22. (b); 23. (e);

24. (b);





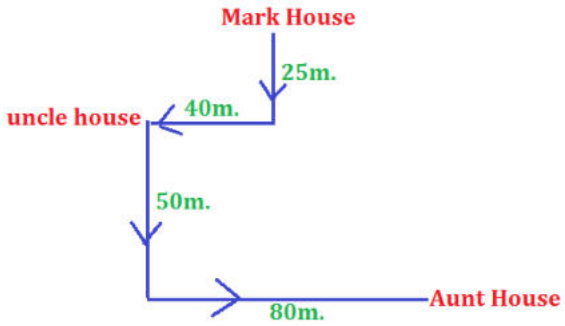
25. (d);

Direction (26-30);

Floor	Persons
9	T
8	R
7	S
6	U
5	P
4	Q
3	V
2	X
1	W

26. (e); 27. (e); 28. (c);
29. (b); 30. (d);

Direction (31-33);



31. (b); 32. (b); 33. (a);

Direction (34-38);

Day	Subjects
Monday	Mathematics
Tuesday	Chemistry
Wednesday	Hindi
Thursday	Geography
Friday	English
Saturday	Physics
Sunday	Biology

34. (e); 35. (b); 36. (d);
37. (b); 38. (d); 39. (b);
40. (d);

QUANTITATIVE APTITUDE

41. (b); Part of the tank filled in 1 hour

$= \frac{1}{10} + \frac{1}{16} - \frac{1}{32} = \frac{16+10-5}{160} = \frac{21}{160}$

∴ Tank will be filled in $\frac{160}{21} = 7\frac{13}{21}$ hours

42. (e); ∵ a, b, c and d are four consecutive numbers and a + c = 120

∴ a +a+4 = 120

$\Rightarrow 2a = 116 \Rightarrow a = 58$

∴ b = 60 and d= 64

∴ b × d = 60 × 64 = 3840

43. (d); Let the numbers be a, b, and c respectively.

$\therefore \frac{a+c}{2} - \frac{b+c}{2} = 24$

⇒ (a +c) – (b + c) = 24 × 2 = 48

⇒ a –b = 48

44. (e); ∵ 3 men = 9 boys

∴ 1 man = 3 boys

∴ 5 men + 6 boys

= (5 × 3 + 6) boys = 21 boys

$\therefore M_1D_1 = M_2D_2$

$= 9 \times 21 = 21 \times D_2$

$= D_2 = \frac{9\times21}{21} = 9$ days

45. (c); Principal $= \frac{SI \times 100}{Time \times Rate}$

$\therefore \frac{240 \times 100}{5 \times 6} = Rs\ 800$

46. (d); Graduate population of city A and E together

$= 22000 \times \frac{5}{11} \times \frac{20}{100} + 24000 \times \frac{5}{8} \times \frac{1}{3}$

$= 2000 + 5000 = 7000$

Graduate population of city B and D together

$= 16000 \times \frac{3}{8} \times \frac{35}{100} + 20000 \times \frac{2}{5} \times \frac{25}{100}$

$= 2100 + 2000 = 4100$

Required percentage $= \frac{7000-4100}{7000} \times 100$

$= \frac{2900}{7000} \times 100 \approx 42\%$

47. (a); Population who are literate but not graduate of city C

$= 96000 \times \frac{2}{3} \times \frac{68}{100}$

$= 43520$

Average graduate population of city D & E together

$= \frac{1}{2}\left[20000 \times \frac{2}{5} \times \frac{25}{100} + 24000 \times \frac{5}{8} \times \frac{1}{3}\right]$

$= \frac{1}{2}[2000 + 5000] = 3500$

$\therefore$ Required difference = 43520 – 3500

= 40020

48. (e); Illiterate male in city B

$= 16000 \times \frac{5}{8} \times \frac{3}{8} = 3750$

Graduate female in city D

$= 20000 \times \frac{2}{5} \times \frac{25}{100} \times \frac{3}{5}$

$= 1200$

Required ratio $= \frac{3750}{1200} = 25 : 8$

49. (b); Illiterate Population in City D

$= 20{,}000 \times \frac{3}{5} = 12000$

Illiterate Population in City C

$= 96{,}000 \times \frac{1}{3} = 32000$

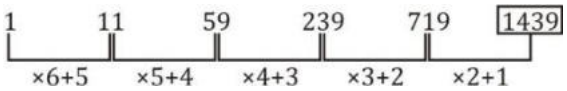
Required % $= \frac{12000}{32000} \times 100 = 37.5\%$

50. (e); *Required percentage*

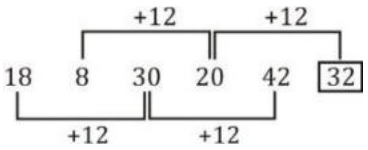
$= \frac{22{,}000 \times \frac{5}{11} + 16{,}000 \times \frac{3}{8}}{20{,}000 \times \frac{3}{5} + 20{,}000 \times \frac{2}{5} \times \frac{75}{100}} \times 100$

$= \frac{10{,}000 + 6{,}000}{12{,}000 + 6{,}000} \times 100 = \frac{1600}{18} \approx 89\%$

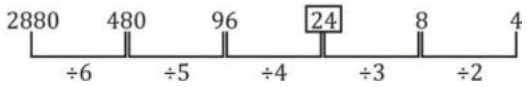
51. (b);



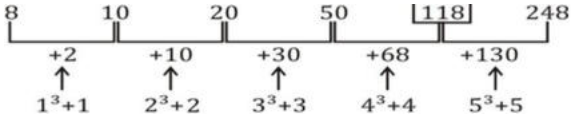
52. (d);



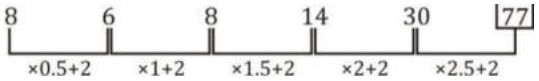
53. (b);



54. (e);



55. (c);



56. (c); Let total production of the company be x

$\therefore$ Required percent $= \frac{(.30x - 0.10x)}{0.30x} \times 100$

$= \frac{2}{3} \times 100 = 66\frac{2}{3}\%$ less

57. (a); Required difference = 30% of 1,20,000 – 20% of 1,20,000 = 12000

58. (e); Let total production be x

Required ratio $= \frac{40\% \text{ of } x}{10\% \text{ of } x} = 4 : 1$

59. (d); Let total production be x

ATQ,

10% of x = 15000

$\frac{x}{10} = 15000$

x = 1,50,000

Required average

$= \frac{10\% \text{ of } 1{,}50{,}000 + 50\% \text{ of } 1{,}50{,}000}{2}$

$= \frac{15000 + 75000}{2} = 45000$

60. (b); Let total production of each previous years be x

$\therefore \frac{30}{100}x = 12000 \Rightarrow x = 40000$

Total production in 2018 $= \frac{110}{100} \times 40000$

= 44000.

61. (e);

I.	***II.***
$x^2 - 264 = 361$	$y^3 - 878 = 453$
$or, x^2 = 361 + 264$	$or, y^3 = 453 + 878$
$\therefore x^2 = 625$	$or, y^3 = 1331$
$\therefore x = \sqrt{625} = \pm 25$	$\therefore y = \sqrt[3]{1331} = 11$

Hence no relation can be established.

62. (c);

I.	II.
$3x^2 + 14x + 15 = 0$	$3y^2 - 13y + 14 = 0$
$or, 3x^2 + 9x + 5x + 15 = 0$	$or, 3y^2 - 6y - 7y + 14 = 0$
$or, 3x(x+3) + 5(x+3) = 0$	$or, 3y(y-2) - 7(y-2) = 0$
$or, (3x+5)(x+3) = 0$	$or, (3y-7)(y-2) = 0$
$\therefore x = -\frac{5}{3}, -3$	$\therefore y = \frac{7}{3}, 2$

Hence $x < y$

63. (c);

I. $12x^2 - 17x + 6 = 0$
or, $12x^2 - 9x - 8x + 6 = 0$
or, $3x(4x - 3) - 2(4x - 3) = 0$
or, $(3x - 2)(4x - 3) = 0$
$\therefore x = \frac{2}{3}, \frac{3}{4}$

II. $y^2 - 16y + 63 = 0$
or, $y^2 - 9y - 7y + 63 = 0$
or, $y(y - 9) - 7(y - 9) = 0$
or, $(y - 7)(y - 9) = 0$
$\therefore y = 7, 9$

Hence $x < y$

64. (a);

I. $x^2 - 48x + 575 = 0$
or, $x^2 - 23x - 25x + 575 = 0$
or, $x(x - 23) - 25(x - 23) = 0$
or, $(x - 25)(x - 23) = 0$
$\therefore x = 25, 23$

II. $46y^2 - 35y - 11 = 0$
or, $46y^2 - 46y + 11y - 11 = 0$
or, $46y(y - 1) + 11(y - 1) = 0$
or, $(46y + 11)(y - 1) = 0$
$\therefore y = -\frac{11}{46}, 1$

Hence $x > y$

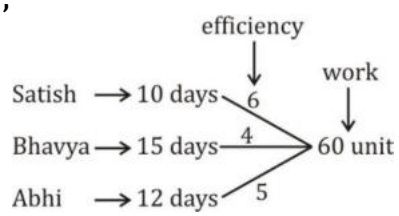
65. (e);

I. $15x^2 - 11x - 12 = 0$
or, $15x^2 - 20x + 9x - 12 = 0$
or, $5x(3x - 4) + 3(3x - 4) = 0$
or, $(5x + 3)(3x - 4)$
$\therefore x = -\frac{3}{5}, \frac{4}{3}$

II. $20y^2 - 49y + 30 = 0$
or, $20y^2 - 25y - 24y + 30 = 0$
or, $5y(4y - 5) - 6(4y - 5)$
$\therefore y = \frac{6}{5}, \frac{5}{4}$

No relation

66. (a);



(Satish+ Bhavya+ Abhi) 2 days work = 15 × 2 = 30 unit
Bhavya 1 day work = 4 unit
∴ Whole work will be completed
$= 2 + \frac{26}{9} + 1 = 2 + 2\frac{8}{9} + 1$
$= 5\frac{8}{9} days$

67. (d); $Second\ no. = \frac{100 \times 12}{100} = 12$
$\therefore\ first\ no. = 12^3 \times \frac{3}{2} = 1728 \times \frac{3}{2}$
$= 2592$
∴ Required sum = 12 + 2592 = 2604

68. (b); Let the price marked by whole seller be Rs. x
$\therefore\ S.P.\ of\ article\ for\ whole\ seller = x \times \frac{80}{100} \times \frac{110}{100} = \frac{22x}{25} = C.P\ of\ article\ for\ retailer$
$S.P.\ of\ article\ for\ retailer = \frac{22x}{25} \times \frac{125}{100} = \frac{11x}{10}$
ATQ,
$\frac{11x}{10} - \frac{22x}{25} = 1023$
$\frac{55x - 44x}{50} = 1023$
11x = 1023 × 50
⇒ x = Rs. 4650

69. (e); Let present age of Bhagat & Abhi be 9x and 8x respectively
After 10 years.
$\frac{9x+10}{8x+10} = \frac{10}{9}$
81x + 90 = 80x + 100
x = 10
∴ required difference = 10 years.

70. (d); Let radius of smaller & larger circles be r_1 & r_2 respectively.
$2\pi r_1 = 132$
$r_1 = 21$ m
$2\pi r_2 = 176 \Rightarrow r_2 = 28$ m.
∴ Required difference
$= \pi(r_2^2 - r_1^2) = \frac{22}{7} \times 49 \times 7 = 1078\ m^2$

71. (b); Required difference
$= [(16 + 12)\% - (12 + 4)\%] \times 96000$
$= \frac{12}{100} \times 96000 = 11520$

72. (a); Required percentage
$= \frac{(12+32) - (16+24)}{(16+24)} \times 100$
$= \frac{4}{40} \times 10 = 10\%$

73. (e); Total chairs sold by shopkeeper F
$= \frac{4}{100} \times 96000 = 3840$
Required difference
$= \frac{(7-5)}{12} \times 3840 = 640$

74. (d); Total chairs sold by Shopkeeper P
$= \left[\frac{1}{2} \times 4 + \frac{1}{5} \times 12 + \frac{2}{5} \times 16\right] \times \frac{96000}{100}$
$= 10368$

75. (c); $Required\ ratio = \frac{\frac{16+24+12}{3}}{\frac{12+32}{2}}$
$= \frac{52 \times 2}{3 \times 44} = 26 : 33$

76. (a); 1528 + 21 – 840 – 510 = ?
? = 1549 – 1350
? = 199

77. (c); $\frac{35}{7} + 296 - 1944 = ? - 1800$
301 + 1800 – 1944 = ?
? = 157.

78. (b); $\frac{65}{100} \times 180 + \frac{?}{100} \times 210 = \frac{80}{100} \times 225$
$\frac{?}{100} \times 210 = 180 - 117$
$? = \frac{63 \times 100}{210} = 30$

79. (e); 1500 + 140 – 1 + ? = 1764
? = 1764 – 1639
? = 125

80. (d); $\frac{13}{17} \times \frac{8}{156} \times 153 = ? \Rightarrow\ ? = 6$

REASONING ABILITY

Directions (1-5): Study the following information to answer the questions given below:

Seven persons were born in seven different years. Their ages are calculated with respect to 2019. None of them was born before 1965. They belong to different professions such as Manager, HR, Artist, Doctor, Teacher, Engineer, and Pilot but not necessarily in the same order.
Note: All the persons were born on the same date and same month.
Nisha was 38 years old. No one was born between Nisha and the one who is Pilot. Three persons were born between the one who is Pilot and Aditi, who is the oldest among all and born before 1970 but in the even-numbered year. No one was born between Aditi and the one who is a Manager. More than one person was born between the ones who are Manager and Pilot. Dheeraj was born before Nisha but not just before. There is 4 years difference between Aditi and Dheeraj. The difference between the ages of Dheeraj and Kamal is the same as between Nisha and Swati. Pranav who was born before Pooja but after Swati. Swati was 11 years older than Pranav. Pranav was born in 1998. The difference between the ages of Kamal and Pranav was not more than 20 years. The one who is a Teacher was born just before HR. Pooja does not an HR. There are 7 years of difference between the ones who are Doctor and Engineer. No one was born between Pilot and Doctor.

1. How many persons were born between the ones who were Artist and Doctor?
(a) One (b) None (c) Two
(d) Five (e) None of these

2. In which year Kamal was born?
(a) 1976 (b) 1978 (c) 1981
(d) 1987 (e) None of these

3. Which of the following combination is true?
(a) Nisha-41-HR
(b) Dheeraj-41-Manager
(c) Aditi-51-Doctor
(d) Swati-32-Piolt
(e) None id true

4. Four of the following five are alike in a certain way and hence they form a group. Which one of the following does not belong to that group?
(a) Aditi-Artist
(b) Kamal-Manager
(c) Nisha-HR
(d) Swati-Pilot
(e) Pooja-Engineer

5. The number of persons were born between Kamal and Pranav is same as the number of persons were born between Swati and ___?
(a) Pooja (b) Dheeraj (c) Aditi
(d) Nisha (e) None of these

6. **Statement I-** The Indian Army plans to recruit women in combat roles, especially with regard to the operations in Jammu & Kashmir, Army Chief General Bipin Rawat said at the Passing Out Parade at the Indian Military Academy (IMA).
Statement II- Many a time jawans in Kashmir feel hesitant about dealing with women when they are in the front lines.
Statement III- The situation in Kashmir has been volatile for decades, flaring up for worse since last summer. In the last four days alone, the army has killed 13 suspected militants.
Which of the following may be cause/effect among the above statements?
(a) Statement II will be cause and Statement I and III will be it's effects.
(b) Statement II and III will be cause and I will be it's effect.
(c) Statement III is cause and Statement I is it's effect and Statement II is effect of independent cause.
(d) Statement II is cause and Statement I is it's effect and Statement III is effect of independent cause.
(e) Statement III is cause and Statement II is it's effect and Statement I is effect of independent cause.

7. **Statement:** No one in the Royal Family wants to be king or queen by their choice, Prince Harry has told a US magazine, adding that "we will carry out our duties at the right time". "Is there any one of the Royal Family who wants to be king or queen? I don't think so," he told Newsweek.
Which of the following is not in line with the above statement?
(I) He said the royals were doing their duties "for the greater good of the people".
(II) Harry, who recently said he had received counselling to cope with the death of his mother in a car crash in Paris, said: "My mother had just died, and I had to walk a long way behind her coffin, surrounded by thousands of people watching me while millions more did on television.

(III) He also paid tribute to his "remarkable" grandmother for letting the younger royals do things their own way.

(a) Only (I)
(b) Only (II)
(c) Only (III)
(d) Both (II) and (III)
(e) None of these

Direction (8-10): Study the following information carefully and answer the questions given below:

In each of the questions below are given some statements followed by some conclusions. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

8. **Statements:** Only a few Pizza are Burger. Only a few Burger are Maggie. All Maggie are Momo's. No Pasta is Maggie.
Conclusions:
I. Some Maggie are not Burger.
II. Some Pizza are not Pasta.
III. Only a few Pizza are Maggie.
(a) If only conclusion I and II follows
(b) If only conclusion II follows
(c) If either conclusion II or III and I follows
(d) None follows
(e) None of these

9. **Statements:** Only a few Bank are Account. Few Current are Saving. All Account are Saving. Some FD are not Account.
Conclusions:
I. Some Account can be FD.
II. Some Saving are not FD.
III. All Bank being Account is a possibility.
(a) If only conclusion I and II follows
(b) If only conclusion II and III follows
(c) If only conclusion I follows
(d) All I, II and III follow
(e) None Follow

10. **Statements:** Only Vertical is Circle. Some Vertical are not Square. All Square are Triangle.
Conclusions:
I. Some Circle can be Triangle.
II. All Square being Vertical is a possibility.
III. Only a few Vertical is Triangle.
(a) If only conclusion I and II follows
(b) Only II
(c) If only conclusion I follows
(d) All I, II and III follow
(e) None Follow

Directions (11-15): Study the following information carefully and answer the questions given below:

Eight persons are sitting in a straight line equidistant from each other. Some of them are facing north and some of them are facing south. Not more than two persons having same direction are sitting adjacent to each other. Three persons are sitting to the left of U. Only one person sits between Z and W and both of them faces in the same direction. Z does not sit at the extreme end of the line. Y who is not an immediate neighbor of S sits second to the right of X who sits at one of the extreme ends of the line. V sits fifth to the left of T who faces in the south direction. S sits immediate right of U and both faces in opposite directions to each other. Persons sitting at the extreme ends are facing in the same direction. Y faces north direction.

11. How many persons are facing in the south direction?
(a) Four (b) Five (c) Three
(d) Two (e) Six

12. Who sits second to the left of S?
(a) T (b) V (c) X
(d) Z (e) None of these

13. Four of the following five are alike in a certain way and hence form a group, which of the following does not belong to the group?
(a) S (b) U (c) Z
(d) W (e) X

14. How many persons sit between Z and Y?
(a) One (b) None (c) Three
(d) Two (e) More than three

15. Which of the following is true?
(a) No one sits to the left of W
(b) U sits second to the right of T.
(c) Z is facing in north direction
(d) Both (b) and (c) are true
(e) All are true

Directions (16-20): Each of the questions below consists of a question and two statements numbered I and II given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and give answer.

(a) if the data in statement I alone are sufficient to answer the question, while the data in statement II alone are not sufficient to answer the question.
(b) if the data in statement II alone are sufficient to answer the question, while the data in statement I alone are not sufficient to answer the question.
(c) if the data either in statement I alone or in statement II alone are sufficient to answer the question.
(d) if the data given in both statements I and II together are not sufficient to answer the question.
(e) if the data in both statements I and II together are necessary to answer the question.

16. Five members i.e. P, Q, R, S and T are in a family, then who is the husband of R?
Statement I: R is sister in law of S who is the child of P.
Statement II: R is the daughter in law of Q who is the mother of S.

17. What is the code for "cow"?
Statement I: "big cow rat" is coded as "mn vg dc" and "rat dew grass" is coded as "vg bh sx"
Statement II: "big same use" is coded as "mn we qs" and "rat cow use" is coded as "we vg dc"

18. Six persons are of different heights. Who is 2nd shortest person?
Statement I: Anshul is taller than Ankita and shorter than Anamika. Only one person is taller than Akash.
Statement II: Ankita is shorter than Akash and taller than Aditya. Ankit is not shortest person.

19. Five persons i.e. F, P, R, S and T are living in different floors of five floored building. Who is living in topmost floor?
Statement I: There are two floor gaps between P and F who is immediate above R. S is in bottommost floor.
Statement II: Only one person is above R who is just above S. There are three floors gap between P and F who is not in topmost floor.

20. Five persons i.e. A, B, C, D and G are sitting in a row facing North. Who sits in the middle of the row?
Statement I: D sits 3rd to the right of G who is at an extreme end. Two persons sit between A and B who is an immediate neighbor of D.
Statement II: B sits immediate right of D who sits 3rd to the left of A. C sits immediate right of B.

Directions (21-23): In each of the questions, relationships between some elements are shown in the statements. These statements are followed by conclusions numbered I and II. Read the statements and give the answer.
(a) If only conclusion I follows.
(b) If only conclusion II follows.
(c) If either conclusion I or II follows.
(d) If neither conclusion I nor II follows.
(e) If both conclusions I and II follow.

21. **Statements:** A≤B>D=C, C>E≤F
Conclusion: **I.** A>C **II.** E<B

22. **Statements:** P>Q>R=S, S≥T≤U≥V
Conclusions: **I.** Q>T **II.** S≤V

23. **Statements:** B>C>D<E=F, H≤E>G=N
Conclusions: **I.** F<N **II.** N>D

Directions (24-28): Study the information carefully and answer the questions given below.

A certain number of persons are sitting in a row facing north. M sits fourth to the left of O. Only two persons sit between M and Q. R sits second to the left of Q. S sits fourth to the right of O. Not more than five persons sit between P and Q. P sits to the right of S. Only three persons sit to the left of R.

24. Which of the following statement is true?
(a) M sits at an extreme end
(b) Only one person sits between M and R
(c) All are true
(d) Ten persons sits between M and S
(e) None is true

25. How many persons are sitting between O and Q?
(a) One (b) Two (c) None
(d) Three (e) More than three

26. If P sits at an extreme end of the row, then how many persons are sitting in the row?
(a) Ten (b) Twelve (c) Thirteen
(d) Eleven (e) More than thirteen

27. What is the position of S in the row?
(a) Immediate right of P
(b) Sixth to the right of Q
(c) Eighth to the left of M
(d) None of these
(e) Seventh to the right of R

28. If L sits exactly between S and O, then how many persons sits to the left of L?
(a) Ten
(b) Nine
(c) Eight
(d) Cannot be determined
(e) More than ten

29. India and the UAE have discussed measures to deepen cooperation in a range of areas including defence, security, terrorism and trade as the two countries held the second round of their strategic dialogue in Abu Dhabi.
Which among the following is not-in-line with given statement?
(I) The Indian delegation at the talks held yesterday was led by Minister of State for External Affairs M J Akbar while the UAE side was headed by its Minister of State for Foreign Affairs Anwar Gargash.
(II) India ships wheat to Afghanistan via Chabahar. India on Sunday began shipment of wheat to Afghanistan through the Iranian port of Chabahar.

(III) The UAE has raised its investment profile in India, and cooperation has increased on security issues, the statement said.

(a) Only I
(b) Both II and III
(c) Both I and III
(d) Only II
(e) None of these

30. Modi government to reframe social welfare schemes for OBCs. In the run-up to the high stakes elections in Gujarat and Himachal Pradesh, the Narendra Modi-led government has moved to reframe social welfare schemes for other backward classes (OBCs).
Which among the following can be hypothesized from the given statement?

(I) The targeted schemes promise quality residential accommodation and scholarships to OBC students.
(II) This reframe of social welfare schemes for OBCs by the Modi government is a political move to target high stakes elections in Gujarat and Himachal Pradesh.
(III) The ministry has laid down guidelines for construction of hostels, which would be energy efficient, economical yet good quality.

(a) Only (I)
(b) Both (III) and (I)
(c) Only (II)
(d) Both (II) and (III)
(e) None of these

Directions (31-33): Study the following information carefully and answer the questions given below.
A@B (6)- A is 10m in north of B
A$B (10)- A is 14m in south of B
A%B (12)- A is 10m in east of B
A&B (15)- A is 13m in west of B
P%Q(16), R&S(12), T&U(20), U$S(15), P@T(10), W$R(17)

31. What is the shortest distance between point P and point U?
(a) $2\sqrt{130}$m (b) 520m (c) 130m
(d) 260m (e) None of these

32. If M is the mid point of the line segment TU, then determine the distance between the point T and point M?
(a) 9m (b) 10m (c) 8m
(d) None of these (e) 7m

33. What is the shortest distance between the point U and point W?
(a) 85m (b) 120m (c) None of these
(d) $\sqrt{104}$m (e) $\sqrt{130}$m

Direction (34-38): Study the following information carefully and answer the questions given below:

Eight boxes AC, BD, EG, FH, IK, JL, MO and NP have different brands toffee i.e. Poppins, Melody, Kismi bar, Gems, Hajmola, Boomer, Center fresh and Coffee bite places one above another. All are not necessarily in same order.
Box FH is placed above the box which has Center fresh. There are three boxes are between the boxes have Melody and Hajmola. There are only three boxes are above the box MO. There is only one box is between MO and FH. Box AC is immediate below the box which has Melody. Box BD places just above box which has Melody and just below the box has Gems. Box FH neither has Gems nor has Hajmola. Box EG places just above the box which has Poppins and just below the box which has Coffee bite. There is one box between box IK which has Boomer and box JL. Box MO doesn't have Center fresh.

34. Which among the following box places just above the box which has Kismi bar?
(a) AC (b) BD (c) EG
(d) FH (e) None of these

35. Which among the following toffee is in box NP?
(a) Poppins (b) Melody (c) Kismi bar
(d) Gems (e) None of these

36. How many boxes are placed between box AC and the box which have Hajmola?
(a) One (b) Two (c) Three
(d) More than three (e) None

37. Which among the following is not false?
(a) AC-Hajmola (b) BD-Gems (c) EG-Melody
(d) FH- Coffee bite (e) None is true

38. Four of the following five are alike in certain way based from a group, find the one which does not belong to that group?
(a) IK- Kismi bar
(b) EG- Coffee bite
(c) NP- Center fresh
(d) BD- Gems
(e) MO- Melody

Directions (39-40): Study the following information carefully and answer the questions given below:

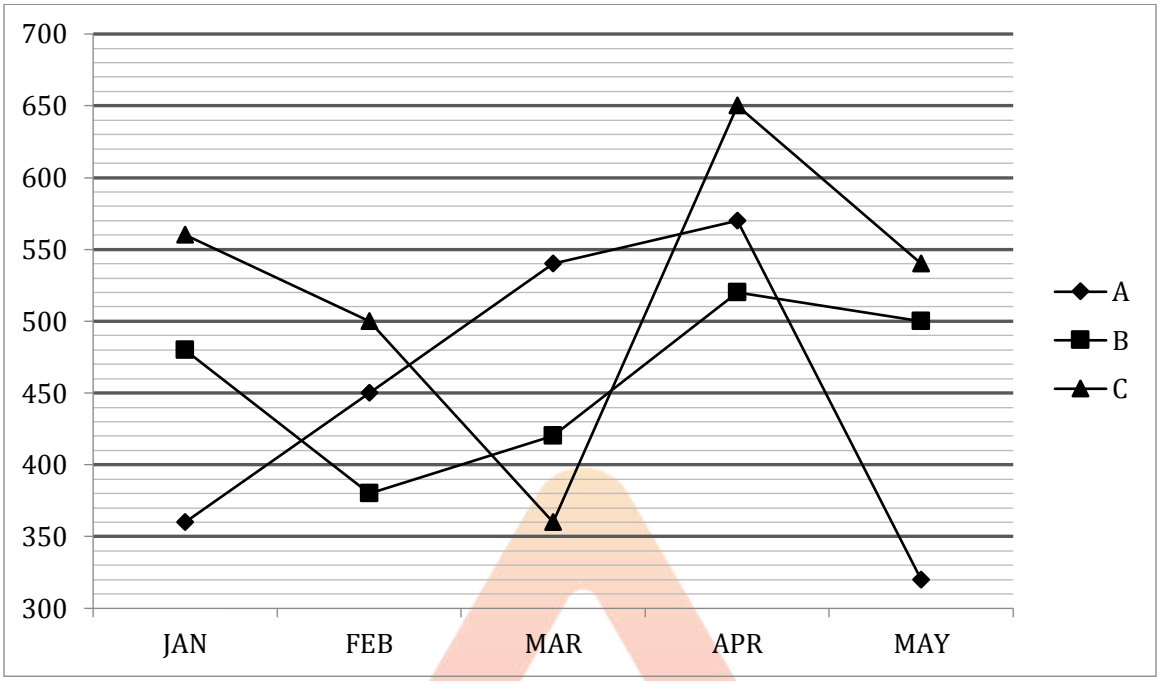
In a certain code language
'exams good for growth' is coded as 'jam, dam, mam, ram'
'bank exams are difficult' is coded as 'pam, jam, vam, bam'
'bank growth not easy' is coded as 'pam, ram, lam, tam'
'easy for difficult preferred' is coded as 'tam, mam, bam, sam'

39. What is the code for the word 'exams' in the given code language?
(a) jam (b) tam (c) lam
(d) ram (e) None of these

40. 'ram' is the code for which of the following words?
(a) bank (b) exams (c) easy
(d) difficult (e) None of these

QUANTITATIVE APTITUDE

Directions (41-45): Following Line Graph given provides the details of total number of rides taken by 3 different drivers in 5 different months and the Table DI given below provides the details of percentage of total female rides taken by all the drivers in 5 different months and answer the questions accordingly.



Month/ Driver	% of female ride taken by Driver A	% of female ride taken by Driver B	% of female ride taken by Driver C
JAN	40%	25%	30%
FEB	30%	40%	44%
MAR	55%	50%	40%
APR	40%	45%	30%
MAY	60%	48%	60%

41. Total number of male rides taken by Driver B in January and march together is approximately what percentage more than the total female rides taken by driver A in April and may together?
(a) 40% (b) 36% (c) 45%
(d) 30% (e) 50%

42. Find the total number of male rides taken by all the three drivers in March together?
(a) 652 (b) 724 (c) 696
(d) 669 (e) 628

43. Find the difference between total no. of female ride taken by all the 3 drivers in January to the total no. of male rides taken by all the 3 drivers in march?
(a) 327 (b) 294 (c) 268
(d) 214 (e) 237

44. Find the respective ratio of total no. of female rides taken by driver A in April and May together to the total no. of male ride taken by Driver B in January and march together?
(a) 14:19 (b) 17:23 (c) 18:23
(d) 19:14 (e) 23:17

45. Find the total number of female rides taken by Driver B in all the five months together?
(a) 848 (b) 956 (c) 984
(d) 918 (e) 884

46. A basket contains 8 Blue, 5 Red and 6 Green balls. 3 Balls are drawn from the basket, then find the probability of getting all 3 balls drawn are of different colors?
(a) $\frac{80}{323}$ (b) $\frac{883}{969}$ (c) $\frac{73}{223}$
(d) $\frac{86}{969}$ (e) $\frac{67}{173}$

47. Suresh was married 14 yrs ago and his present age is $\frac{3}{2}$ times of the age at the time of his marriage. If his son's age is $\frac{1}{3}^{rd}$ of his present age, then find the age of his son.
(a) 16 yrs (b) 18 yrs (c) 14 yrs
(d) 12 yrs (e) 20 yrs

48. A Square and an equilateral triangle have the same area. If the perimeter of the square is 88 cm , then find the area of the equilateral triangle is?
(a) 441 cm^2 (b) 400 cm^2 (c) 484 cm^2
(d) 324 cm^2 (e) 576 cm^2

49. A, B and C together can complete a work in 8 days and A alone can complete the same work in 24 days. If A and B started the work and after 2 days C also joined them, then remaining work was completed by A, B and C together in $6\frac{4}{5}$ days. Find in how many days B alone can complete the whole work?
(a) 28 days (b) 36 days (c) 24 days
(d) 32 days (e) 30 days

50. In a mixture of milk and water, the proportion of milk by weight is 60%. If from the 80 gm mixture, 20 gm of mixture is taken out and 6 gm of pure water is added to the mixture then find the ratio of milk and water in the new mixture.
(a) 5 : 6 (b) 6 : 5 (c) 4 : 3
(d) 3 : 2 (e) 7 : 6

51. Three persons A, B and C started a business by investing in the ratio of $\frac{2}{3} : \frac{1}{2} : \frac{3}{4}$. After 5 months, B increases his investment by $\frac{2}{3}$rd of his initial amount. If after 12 months, the difference of the profit shares of A and C is Rs. 1,350 then find the profit share of B.
(a) Rs. 11,500 (b) Rs. 11,200 (c) Rs. 12,250
(d) Rs. 11,250 (e) Rs. 10,250

Directions (52-56): The following Table DI shows the quantity of waste (Dry and Wet) picked by a truck on 5 different days. The capacity of the truck from Monday to Wednesday is 180 kg and for rest two days is 150 kg.

Day	Quantity of wet waste	Ratio of wet to dry waste	Difference between dry and wet waste. (wet > dry)
Monday	-	5 : 4	20 kg
Tuesday	110 kg	-	22 kg
Wednesday	99 kg	9 : 7	-
Thursday	84 kg	7 : y	24 kg
Friday	-	12 : 7	40 kg

Note:- If the waste produce in a day is greater than the capacity of the truck, then the extra amount of waste will be picked on next day.

52. If on Wednesday the truck picks only 80% of the waste of his capacity, then find the difference between the quantity picked of wet waste and dry waste on the same day? (priority given to wet waste)
(a) 64 kg (b) 48 kg (c) 62 kg
(d) 54 kg (e) 42 kg

53. What is the value of 'y'?
(a) 4 (b) 5 (c) 6
(d) 3 (e) 8

54. Find the ratio of total dry waste produced on Monday, Tuesday and Friday together to wet waste produced on Wednesday and Thursday together?
(a) 194 :218 (b) 185 : 212 (c) 183 : 224
(d) 212:185 (e) 224 : 183

55. What is the amount of waste left by the end of the Wednesday?
(a) 18 kg (b) 16 kg (c) 14 kg
(d) 20 kg (e) 12 kg

56. Find the total quantity of dry waste on all the five days together?
(a) 381 kg (b) 413 kg (c) 361 kg
(d) 337 kg (e) 321 kg

Directions (57-60): Given questions are based on a missing series pattern and following that pattern find the relation between P, Q and R.

57. 300, 324, 384, 504, P, 1050
450, 474, Q, 654, 864, 1200
200, 224, 284, 404, R, 850
(a) P>Q<R (b) P<Q<R (c) P=Q>R
(d) P<Q=R (e) P<Q>R

58. 2700, 5400, P, 7200, 1440, 8640
2100, Q, 1400, 5600, 1120, 6720
1500, 3000, 1000, R, 800, 4800
(a) P>Q>R (b) P<Q=R (c) P<Q>R
(d) P=Q>R (e) P<Q<R

59. 35, 70, 210, P, 4200, 25200
140, 280, Q, 3360, 16800, 100800
40, 80, 240, R, 4800, 28800
(a) P>Q<R (b) P<Q>R (c) P<Q<R
(d) P=Q<R (e) P>Q>R

60. 7, 15, 47, 191, Q, 5754
9, 19, 59, P, 1199, 7199
11, 23, 71, 287, R, 8639
(a) P>Q<R (b) P<Q>R (c) P<Q<R
(d) P=Q<R (e) P>Q>R

Directions (61-64): In each of the following questions, two equations (I) and (II) are given. Solve the equations and mark the correct option:
(a) if x>y
(b) if x≥y
(c) if x<y
(d) if x ≤y
(e) if x = y or no relation can be established between x and y.

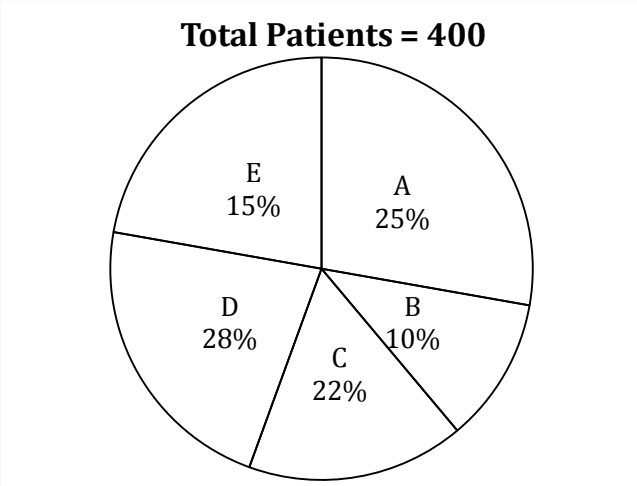
61. **I.** $2x^2 + 11x + 12 = 0$ **II.** $8y^2 - 22y - 21 = 0$

62. **I.** $x^2 - 17x - 60 = 0$ **II.** $y^2 + 42y + 185 = 0$

63. **I.** $x^2 + 41x + 420 = 0$ **II.** $6y^2 - 11y - 10 = 0$

64. **I.** $x^2 - 8x - 273 = 0$ **II.** $y^2 + 6y - 432 = 0$

Directions (65-69): Given pie chart provides the details of total number of patients visited to different doctors for their problem and the table provides the details of fees of different doctors. Read the instruction carefully and answer the question accordingly.



Note:-
A and B are Junior Doctor
C and D are Senior Doctor
E is Dean

Doctor's Profile	Fees (in Rs)	Additional charge on fees
Junior Doctor	1000	15%
Senior Doctor	1500	20%
Dean	2000	25%

65. What is the difference between the total fees received by Doctor C and the total fees received by Doctor D?
(a) Rs 40800 (b) Rs 43200 (c) Rs 38400
(d) Rs 36800 (e) Rs 34200

66. Find the respective ratio of total fees received by Doctor A from all its patient to the total fees received by Doctor E from all its patients
(a) 27 : 31 (b) 30 : 23 (c) 23 : 30
(d) 31: 27 (e) 29 : 31

67. Total fees received by junior doctor B is what percentage more/less than the total fees received by Doctor E?
(a) $69\frac{1}{3}\%$ (b) $60\frac{2}{3}\%$ (c) 72%
(d) $68\frac{2}{3}\%$ (e) 64%

68. If the Doctor E's fees is increased by 15% from the current fees, then find the total fees received by Doctor E when the fees is increased? (in Rs)
(a) 1,72,500 (b) 1,78,500 (c) 2,12,000
(d) 1,92,500 (e) 2,04,000

69. Find the average of total fees received by both Junior Doctors and Senior Doctors together?
(a) Rs 1,28,500 (b) Rs 1,25,800 (c) Rs 1,30,250
(d) Rs 1,22,350 (e) Rs 1,35,600

Directions (70-74): Study the given passage carefully and answer the following questions

A train is travelling from station A to E. At station A, 80 person board in the ratio of male to female of 9 : 7.
At station B, 15 men got down and 5 women boarded the train. At station C, half of the women got down and the same number of men boarded the train
At station D, x number of male got down and now the ratio of male to female in train is 7 : 4

70. If 50% of male who were travelling from B to C do not have a valid ticket and 60% of the female travelling from B to C do not have a valid ticket, then find the number of passengers who are travelling from B to C with invalid ticket ?
(a) 43 (b) 39 (c) 47
(d) 49 (e) 51

71. The number of females travelling from station B to C is approximately how much percent more than the number of males travelling from station D to E?
(a) 10% (b) 21% (c) 18%
(d) 14% (e) 24%

72. Find the difference between the passengers travelling from starting point to destination point?
(a) 25 (b) 30 (c) 34
(d) 38 (e) none of these

73. Which of the following is true?
(A) The number of females travelling from station A to B is equal to the no. of males travelling from station D to E
(B) The total number of passengers travelling from Station C to D is 45% of the no. of males who boarded from the starting point
(C) The difference between the no. of male and female travelling from station D to E is half of the difference between the no. of males and females travelling from station C to D
(a) Only A (b) Only C (c) Only A & C
(d) Only B & C (e) All A, B and C

74. Find the ratio of total no. of passengers travelling from station D to E and B to C?
(a) 17 : 13 (b) 11 : 14 (c) 13 : 17
(d) 14 : 11 (e) 17 : 19

75. Total distance between A and B is 792 km and Car P starts from station A at 8 a.m with speed 64 km/hr towards B and Car Q starts from station B at 11 a.m with speed 86 km/hr towards A. Find the distance from station B when both cars will meet each other ?
(a) 430 km (b) 258 km (c) 344 km
(d) 312 km (e) 384 km

76. A, B and C invested Rs 5500, Rs 4500 and Rs 6000 for three years in a partnership. After 1 year, A decreased his investment by Rs 1000, B increased his investment by Rs.500 and C's investment remains the same for the whole period of time. If the total profit at the end of 3 years is Rs 9400, then find the profit share of C?
(a) Rs 4200 (b) Rs 3600 (c) Rs 3800
(d) Rs 4000 (e) Rs 3000

Directions (77-80): Each of the following question is followed by two quantities I, and II. You have to determine the value of the quantities using the information provided and compare the quantities to answer as per the instruction set provided below.
(a) Quantity I>Quantity II
(b) Quantity I≥Quantity II
(c) Quantity I<Quantity II
(d) Quantity I≤Quantity II
(e) Quantity I=Quantity II or no relation

77. **Quantity I:** By selling 15 apples, a seller gains the selling price of 2 apples. Calculate his gain percentage.
Quantity II: 25% profit is gained when an article is sold for 625 rupees. Calculate the loss % when the same article is sold for 435 rupees.

78. A train travelling at 54 kmph crosses a platform in 25 seconds and a man standing on the same platform in 12 seconds
Quantity I: Length of the train.
Quantity II: Length of the platform.

79. P works twice as fast as Q, whereas P and Q together can work 3 times as fast as R. P,Q and R together can do the same work in $\frac{15}{2}$ days
Quantity I: Time taken by P and Q together to complete the work.
Quantity II: Time taken by Q and R together to complete the work.

80. The age of Manan is 50% more than that the age of Shikhar. The age of Rohit is 20% less than the age of Manan. The age of Krunal is 10% less than the age of Rohit.
Quantity I: By what percent the age of Rohit is more than the age of Shikhar.
Quantity II: By what percent the age of Krunal is more than the age of Shikhar.

ENGLISH LANGUAGE

Directions (81-85): In each of the questions given below, a sentence is given with one blank. Below each sentence, FOUR words are given. Five options are provided with various combinations of these words. You have to choose the combination with the correct set of words which can coherently fit into the given sentence.

81. When Margot lost all her money gambling, her family was forced to live in _____.
(I) penury **(II)** mansion
(III) grandeur **(IV)** poverty
(a) Only (I)
(b) Only (I), (III) and (IV)
(c) Both (I) and (IV)
(d) Both (II) and (III)
(e) All (I), (II), (III), (IV)

82. Scared of heights all her life, nothing would _____ Ruth's fear of flying.
(I) alleviate **(II)** reduce
(III) aggravate **(IV)** understand
(a) Only (III)
(b) Only (I), (III) and (IV)
(c) Both (I) and (III)
(d) Both (I) and (II)
(e) All (I), (II), (III), (IV)

83. Sometimes it seems as though we live in a/an _____ world filled with uncaring people.
(I) apathetic **(II)** benevolent
(III) passive **(IV)** indifferent
(a) Only (III)
(b) Only (I), (III) and (IV)
(c) Both (I) and (III)
(d) Both (I) and (II)
(e) All (I), (II), (III), (IV)

84. Taking the yoga class has helped me release my stress so I can become more _____.
(I) abundant **(II)** pernicious
(III) placid **(IV)** injurious
(a) Only (III)
(b) Only (I), (III) and (IV)
(c) Both (I) and (III)
(d) Both (I) and (II)
(e) All (I), (II), (III), (IV)

85. The committee met for several hours, but _____ nothing because they argued the whole time.
(I) achieved **(II)** accomplished
(III) gained **(IV)** attained
(a) Only (III)
(b) Only (I), (III) and (IV)
(c) Both (I) and (III)
(d) Both (I) and (II)
(e) All (I), (II), (III), (IV)

Directions (86-90): In the following questions two columns are given containing three sentences/phrases each. In first column, sentences/phrases are A, B and C and in the second column the sentences/phrases are D, E and F. A sentence/phrase from the first column may or may not connect with another sentence/phrase from the second column to make a grammatically and contextually correct sentence. Each question has five options, four of which display the sequence(s) in which the sentences/phrases can be joined to form a grammatically and contextually correct sentence. If none of the options given forms a correct sentence after combination, mark (e), i.e. "None of these" as your answer.

86. Column (1)
(A) The company along with its
(B) Including ongoing initiatives
(C) IL&FS has appointed
Column (2)
(D) Aligned with the broader objective
(E) Advisers to prepare a resolution plan
(F) Subsidiaries is facing a liquidity crisis
(a) C-E and B-F
(b) A-F
(c) C-E
(d) Both (b) and (c)
(e) None of these

87. Column (1)
(A) The increase in MSP for rabi crops comes
(B) There are notified crops
(C) For big companies, there are instances
Column (2)
(D) The government said in a release.
(E) Just ahead of the RBI monetary policy announcement.
(F) Of even the infrastructure getting damaged.
(a) C-F
(b) C-E and B-F
(c) A-E
(d) Both (a) and (c)
(e) None of these

88. Column (1)
(A) India will be the third largest aviation
(B) The biggest contribution in
(C) Firstly, we are seeing an
Column (2)
(D) market globally a year sooner.
(E) as the world's largest aviation
(F) restrictive protectionist measures
(a) C-F (b) B-F (c) A-D
(d) C-E (e) None of these

89. Column (1)
(A) Also, the broader NSE Nifty
(B) All the sectoral indices closed in the red
(C) Maruti Suzuki, India's largest carmaker
Column (2)
(D) in their late morning deals .
(E) Foreign Portfolio Investors (FPIs) sold shares .
(F) with 22 of the 30 Sensex stocks finishing lower.
(a) C-F (b) B-F (c) A-D
(d) C-E (e) None of these

90. Column (1)
(A) A writer needs
(B) the garden itself being
(C) All this is fine
Column (2)
(D) houseboat on the silent river
(E) somehow find the necessary bubble
(F) quiet and peaceful environment around him in order to write.
(a) C-F (b) B-F (c) A-F
(d) C-E (e) None of these

Directions (91-100): Read the following passage carefully and answer the questions given below them. Certain words/phrases have been printed in bold to help you locate them while answering some of the questions.

Indian roads are usually characterized by poor infrastructure and congestion which affect travel time and road safety. This is a big **hindrance** in economic development and leads to inefficiency in the transportation of goods and services across the country. To address this, the government has **embarked** upon a massive overhaul of the country's road network through Bharatmala Pariyojana—an umbrella highway development programme involving 34,800 km of road network at an investment of Rs5.35 trillion, to be completed by 2022. The programme focuses on optimizing the efficiency of road traffic movement across the country by bridging critical infrastructure gaps through shorter routes. The end goal is to create economic corridors (ECs) along the path—new industries, more employment and new markets.

The programme, however, will have a negative bearing on the existing road network because it will compete directly with some of the existing build-operate-transfer (BOT) toll road projects. Out of the 44 ECs, about 21 would partially or fully affect the existing alignments, while the remaining 23 that involve upgradation of existing alignment will not result in any deviation. Among the 21 corridors affected, eight have a totally different route (which is shorter) while the remaining 13 have some deviations from the existing alignment. Overall, there are 24 BOT projects and one operate-maintain-transfer (OMT) project whose traffic could be affected by the proposed ECs. The Bharatmala programme may result in traffic diversion from the existing road network to new roads, thereby affecting the toll collection and, consequently, the debt servicing ability of some of the BOT and OMT projects. This has raised the risk of default on 25 national highway toll projects which

involve Rs19,435 crore of debt. The risk of such loan defaults will add to banks' and financial lenders' stressed assets and non-performing assets. In terms of risk, 12% of the projects have a high risk of leakage in traffic, if a completely alternative route is available, 16% of the projects have moderate risks, and 72%, low risks. To arrive at the debt at risk, the debt outstanding for each of these special purpose vehicles (SPVs), their repayment tenure, concession end date, credit profile of the SPV and its sponsor credit risk profile, are considered. Out of the total debt at risk for the 25 affected projects about Rs6,536 crore, which accounts for about 34% of the total debt at risk, is high-risk. Projects with debt at a moderate risk have an aggregate debt of Rs3,483 crore, while about Rs9,416 crore of debt is considered to be low-risk.

To ensure that the existing BOT projects that are at risk of default **did not turn** bad for the financial institutions, swift and adequate measures are needed. The Kelkar committee had observed that since infrastructure projects span over 20-30 years, a private developer may lose bargaining power owing to abrupt changes in the economic or policy environment. It has thus recommended that the private sector must be protected against such loss. This could be ensured by allowing renegotiation of the terms of the concession agreement.

Financial institutions are already **reluctant** to finance the infrastructure sector, given the rise in non-performing assets (NPAs). Add to this the probable difficulties that would arise in the case of 25 BOT projects, which would put additional stress on the road infrastructure exposure. The need of the hour is to realign the terms and conditions of the model concession agreement to ensure that banks do not end up accumulating NPAs. Having an appropriate remedial mechanism for BOT operators will help retain interest for investments in new projects; for the lenders, it will help **curtail** the number of stressed assets from the risk of default.

91. According to the passage, Bharatmala Project aims to
(I) impact industrial development positively
(II) create employment and develop new markets
(III) improve the political status of the country.
(a) Only (I)
(b) Only (II) and (III)
(c) Only (III)
(d) Only (I) and (II)
(e) All are correct

92. According to the passage, what worries BOT operators?
(a) The risk of loan default.
(b) Disruptions in integrated Infrastructure network.
(c) Inability to maintain the overall structure of highway network in India.
(d) Both (a) and (b)
(e) All are correct

93. The total debt at risk is
(a) Rs10,456 crore
(b) Rs3,483 crore
(c) Rs19,435 crore
(d) Rs9,416 crore
(e) Rs18,544 crore

94. The appropriate **title** of the passage is
(a) Renegotiating the concession agreement.
(b) Bharatmala and the rising debt issues
(c) Creating economic corridors
(d) the rising issue of stressed assets
(e) The Kelkar Committee

95. Remedial measure(s) available to BOT operators is/are
(I) provide them the necessary resources for accomplishment of the project.
(II) realigning the terms and conditions of the model concession agreement to ensure that banks do not end up accumulating NPAs.
(III) Allowing renegotiation of the terms of concession agreement to private sector.
(a) Only (I)
(b) Both (II) and (III)
(c) Only (III)
(d) Both (I) and (II)
(e) All are correct

96. A phrase "**did not turn**" is given in the passage is highlighted which may or may not contain grammatical error. There are five alternatives given below, one of which may replace the existing highlighted part to make the sentence grammatically correct and contextually meaningful.
Choose the most appropriate alternative as your answer. If the phrase is grammatically correct, as given, and doesn't require any correction, choose option (e) i.e., "No correction required" as your answer.
(a) does not turn (b) will not turn (c) do not turn
(d) could not turn (e) No correction required

Direction (97-98): Which of the following alternatives among the five options provides the MOST SIMILAR meaning(s) of the word given in BOLD as used in the passage?

97. **Curtail**
(I) reduce **(II)** curb
(III) retrench **(IV)** trunk
(a) Only (III)
(b) Only (II) and (IV)
(c) Only (I), (II) and (III)
(d) Only (II), (III) and (IV)
(e) All are correct

98. Embarked

(I) commence **(II)** initiate
(III) rot **(IV)** undertake
(a) Only (III)
(b) Only (II) and (IV)
(c) Only (I), (III) and (IV)
(d) Only (I), (II) and (IV)
(e) All are correct

Direction (99-100): Which of the following alternatives among the five options provides the MOST OPPOSITE meaning(s) of the word given in BOLD as used in the passage?

99. Hindrance

(I) contrite **(II)** impetus
(III) plausible **(IV)** Check
(a) Only (II)
(b) Only (II) and (IV)
(c) Only (I), (II) and (III)
(d) Only (II), (III) and (IV)
(e) All are correct

100. Reluctant

(I) vaunt **(II)** willing
(III) splendid **(IV)** eager
(a) Only (III)
(b) Only (II) and (IV)
(c) Only (I), (II) and (III)
(d) Only (II), (III) and (IV)
(e) All are correct

Directions (101-105): Read each sentence to find out whether there is any grammatical or idiomatic error in it. The error, if any, will be in one part of the sentence. The number of that part is the answer. If there is 'No error', the answer is (e). (Ignore errors of punctuation, if any.)

101. Why we do not (a)/ meet to discuss (b)/ this matter in detail (c)/ on next Friday? (d)/ No error. (e)

102. Had the opportunity (a)/ been given to him (b)/ he will have (c)/ proved successful (d). / No Error. (e)

103. Jamuna takes delight (a)/with music and (b)/hopes to become (c)/a successful musician. (d)/No error. (e)

104. In spite of toiling (a)/ very hardly he (b)/ realized that he had (c)/ not earned anything substantial. (d)/ No error. (e)

105. You should inform (a)/ your superiors about (b)/ all those events which are (c)/ directly related to your work. (d)/ No error. (e)

Directions (106-110): Answer the following questions after rearranging the following sentences into a coherent paragraph and identify the sentence that doesn't fit into the context of the paragraph. Statement (A) is the first sentence of the paragraph after the rearrangement.

(A) Former RBI Governor Raghuram Rajan's note of caution on the next financial crisis that could be building up needs to be taken in all seriousness.

(B) Clearly, bankers were overconfident and probably did too little due diligence for some of these loans.

(C) The disbursement under Mudra loans alone is Rs.6.37 lakh crore, which is over 7% of the total outstanding bank credit.

(D) It is debatable whether banks have the resources and manpower to do this when they are chasing the bigger borrowers for business and, increasingly these days, recoveries.

(E) In his note to Parliament's Estimates Committee on bank non-performing assets (NPAs), Mr. Rajan has flagged three major sources of potential trouble.

(F) These loans have been sanctioned under the Pradhan Mantri Mudra Yojana, which aims to 'fund the unfunded', and is a signature scheme of the NDA government.

(G) They are Mudra credit, which is basically small-ticket loans granted to micro and small enterprises; lending to farmers through Kisan Credit Cards; and contingent liabilities under the Credit Guarantee Scheme for MSMEs, run by the Small Industries Development Bank of India.

(H) Given that these are small loans up to Rs.10 lakh each, with the borrowers mostly from the informal sector, banks have to monitor them very closely.

106. Considering statement (A) "**Former RBI Governor Raghuram Rajan's note of caution on the next financial crisis that could be building up needs to be taken in all seriousness."** as the first sentence of the rearranged paragraph, then which among the following fails to become the part of the coherent paragraph?

(a) C (b) F (c) B
(d) H (e) G

107. Considering statement (A) "**Former RBI Governor Raghuram Rajan's note of caution on the next financial crisis that could be building up needs to be taken in all seriousness."** as the first sentence of the rearranged paragraph, then which one among the following can consecutively follow the last statement after the rearrangement (excluding the incoherent one)?

(a) Not only could they play one lender off against another by threatening to divert payments to the favored bank, they could also refuse to pay unless the lender brought in more money, especially if the lender feared the loan becoming an NPA.
(b) The risk is that these small-ticket loans will drop under the radar and build into a large credit issue in course of time. The same logic holds true for crop loans made through Kisan Credit Cards.
(c) Yet, unless we can determine the unaccounted wealth of bankers, I hesitate to say a significant element was corruption.
(d) Frauds are different from normal NPAs in that the loss is because of a patently illegal action, by either the borrower or the banker.
(e) None of these

108. Among the following pairs which one of them is formed with two consecutive statements after the rearrangement?
(a) A - G (b) B - E (c) A - F
(d) D - C (e) E – G

109. Considering statement (A) "**Former RBI Governor Raghuram Rajan's note of caution on the next financial crisis that could be building up needs to be taken in all seriousness.**" as the first sentence of the rearranged paragraph, identify the correct sequence of the sentences to form a coherent paragraph (excluding the incoherent one).
(a) AEGCFHD (b) ADECBHF (c) AGHBCDE
(d) ABCDGHF (e) AEGFCBD

110. Considering statement (A) "**Former RBI Governor Raghuram Rajan's note of caution on the next financial crisis that could be building up needs to be taken in all seriousness.**" as the first sentence of the rearranged paragraph, which of the following statement should be FOURTH sentence after the rearrangement? (Excluding the incoherent sentence)
(a) D (b) C (c) G
(d) H (e) B

Directions (111-120): In the following passage, some of the words have been left out, each of which is indicated by a number. Find the suitable word from the options given against each number and fill up the blanks with appropriate words to make the paragraph meaningfully complete.

In the __(111)___ of stakeholders at the local body level, recoverable resources __(112)__ in discarded materials are lost due to dumping. Organic refuse, which __(113)__ about 50% of all garbage, readily lends itself to the ___(114)__ of compost or production of methane for household use or power generation. But it is a major opportunity __(115)___. Organic waste that could help green cities and __(116)__ small and affordable household biogas plants is simply being thrown away. It is also ironic that while some countries such as Rwanda and Kenya have introduced stiff penalties for the __(117)___ of flimsy plastic bags, India is doing little to __(118)__ them from drifting into suburban garbage mountains, rivers, lakes and the sea, and being ___(119)___ by cattle feeding on dumped ___(120)___.

111. (a) demolition (b) revive (c) restrict
(d) absence (e) permission

112. (a) settled (b) equipped (c) surrounded
(d) confined (e) embedded

113. (a) supplies (b) forms (c) classifies
(d) demands (e) extends

114. (a) manufacture (b) accumulation (c) generation
(d) foundation (e) conception

115. (a) awed (b) misled (c) lost
(d) absorbed (e) rapt

116. (a) feed (b) deliver (c) nurtures
(d) provide (e) produce

117. (a) interest (b) favor (c) gain
(d) selection (e) use

118. (a) reduce (b) discourage (c) prevent
(d) facilitate (e) reject

119. (a) absorbed (b) grazed (c) ravaged
(d) ingested (e) grasped

120. (a) limit (b) refuse (c) exclude
(d) evade (e) cease

Solutions

REASONING ABILITY

Solutions (1-5):

Year	Age	Persons	Professions
1968	51	Aditi	Artist
1972	47	Dheeraj	Manager
1978	41	Kamal	Teacher
1981	38	Nisha	HR
1987	32	Swati	Pilot
1998	21	Pranav	Doctor
2005	14	Pooja	Engineer

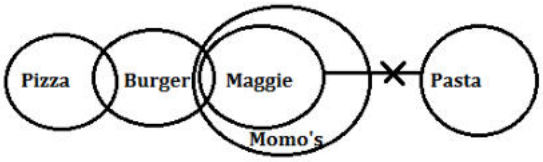
1. (e); 2. (b); 3. (d);

4. (b); 5. (b);

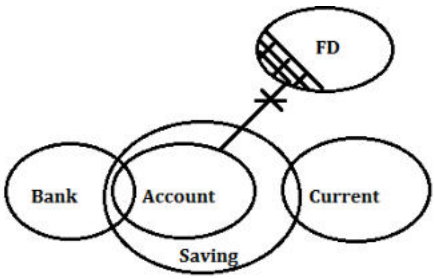
6. (d); In the above question it is clear that Statement II will be the cause and Statement I will be its effect. Because it is mentioned in statement II that jawans have doubt how to deal with the women so this will be cause and its effect will be, The Indian Army will recruit women in combat roles to tackle such kind of situation.

7. (c); Statement (I) suggests that royals are not kings or queens by choice but because they have to, for the welfare of the country which is in line with the statement. (II) fortifies the statement by stating out an example in which he had to face problems because of his royal background. (III) is irrelevant to the statement.

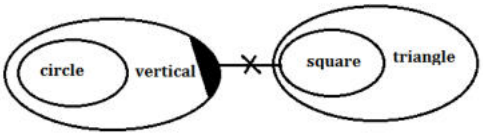
8. (d);



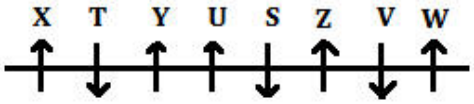
9. (c);



10. (b);



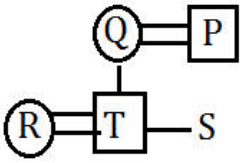
Solutions (11-15):



11. (c); 12. (b); 13. (a);

14. (d); 15. (c);

16. (e); By combining Statement I and II, we get that T is the husband of R.



17. (e); By combining Statement I and II, we get that the code for "cow" is "dc".

Words	Code
big	mn
cow	dc
rat	vg
dew/grass	bh/sx
same	qs
use	we

18. (d); We can't conclude that who is the 2nd shortest person by combining both statements.

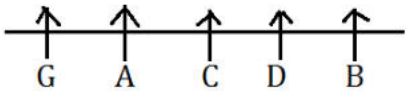
19. (c); By statement I, F is in topmost floor.

Floors	Persons
5	F
4	R
3	T
2	P
1	S

By statement II, P is in topmost floor.

Floors	Persons
5	P
4	R
3	S
2	T
1	F

20. (a); By statement I, C is at middle of the row.

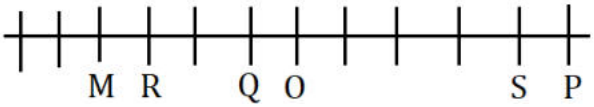


21. (b); **I.** A > C (False) **II.** E < B (True)

22. (a); **I.** Q > T (True) **II.** S ≤ V (False)

23. (d); **I.** F < N (False) **II.** N > D (False)

Solutions (24-28):



24. (e); 25. (c); 26. (b);

27. (e); 28. (c);

29. (d); **For I-** This is in-line with the given statement as it states about the meeting in between Indian and UAE delegations which is also mentioned in the given statement that India and the UAE have discussed measures to deepen cooperation in a range of areas.

For II- This is not- in-line with the given statement as it states about shipment of wheat from India to Afghanistan through the Iranian port of Chabahar whereas the given statement states that India and the UAE have discussed measures to deepen cooperation in a range of areas.

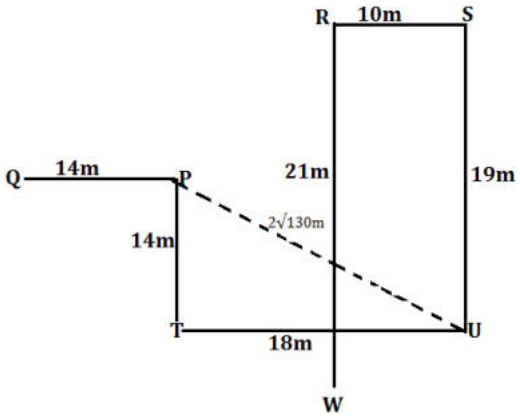
For III- This is in-line with the given statement as it states that UAE has raised its investment profile in India which is also mentioned in the given statement that India and the UAE have discussed measures to deepen cooperation in a range of areas.

30. (c); **For I-** This statement can't be hypothesized from the given statement as nothing is mentioned about facilities given under social welfare schemes for OBCs in the given statement.

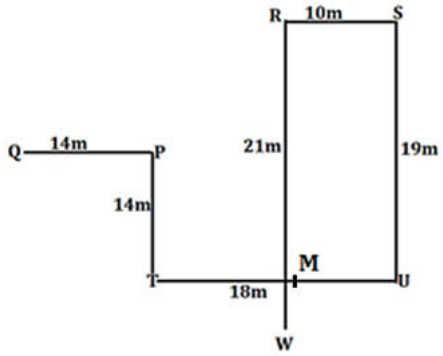
For II- This statement can be hypothesized from the given statement as it is mentioned in the given statement that Modi-led government has moved to reframe social welfare schemes for other backward classes (OBCs) in the run-up to the high stakes elections in Gujarat and Himachal Pradesh.

For III- This statement can't be hypothesized from the given statement as nothing is mentioned about facilities given under social welfare schemes for OBCs in the given statement.

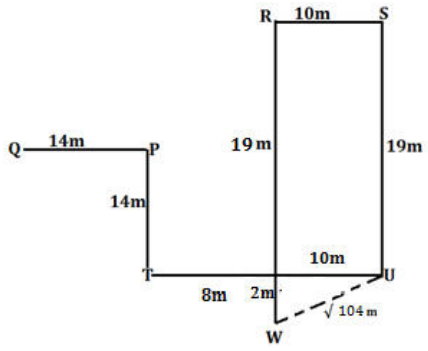
31. (a);



32. (a);



33. (d);



Solutions (34-38):

Box	Toffee
IK	Boomer
FH	Kismi bar
JL	Hajmola
MO	Coffee bite
EG	Gems
BD	Poppins
NP	Melody
AC	Center fresh

34. (e); 35. (b); 36. (d);

37. (e); 38. (e);

Solutions (39-40): The codes for the words are as follows:

Words	Codes
exams	jam
growth	ram
for	mam
good	Dam
bank	Pam
difficult	Bam
are	Vam
easy	tam
not	Lam
preferred	Sam

39. (a); 40. (e);

QUANTITATIVE APTITUDE

41. (b); Total number of male rides taken by Driver B in January and March together

$= 480 \times \frac{75}{100} + 420 \times \frac{50}{100}$

$= 360 + 210 = 570$

Total no. of female rides taken by driver A in April and may together

$= 570 \times \frac{40}{100} + 320 \times \frac{60}{100}$

$= 228 + 192 \quad = 420$

Required percentage $= \frac{570-420}{420} \times 100$

$= 35.71\% = 36\%$ (approx.)

42. (d); Total number of male rides taken by all the three drivers in March together

$= 540 \times \frac{45}{100} + 420 \times \frac{50}{100} + 360 \times \frac{60}{100}$

$= 243+210+216 = 669$

43. (e); Total no. of female ride taken by all the 3 drivers in January

$= 360 \times \frac{40}{100} + 480 \times \frac{25}{100} + 560 \times \frac{30}{100}$

$= 144 + 120 + 168 = 432$

Total no. of male rides taken by all the 3 drivers in March

$= 540 \times \frac{45}{100} + 420 \times \frac{50}{100} + 360 \times \frac{60}{100}$

$= 243 + 210 + 216 = 669$

Required difference = 669 – 432 =237

44. (a); Total no. of female rides taken by driver A in April and May together
$= 570 \times \frac{40}{100} + 320 \times \frac{60}{100}$
$= 228 + 192 = 420$
Total no. of male ride taken by Driver B in January and march together
$= 480 \times \frac{75}{100} + 420 \times \frac{50}{100}$
$= 360 + 210 = 570$
Required ratio $= \frac{420}{570} = 14 : 19$

45. (b); Total number of female rides taken by Driver B in all the five months together
$= 480 \times \frac{25}{100} + 380 \times \frac{40}{100} + 420 \times \frac{50}{100} + 520 \times \frac{45}{100} + 500 \times \frac{48}{100}$
$= 120 + 152 + 210 + 234 + 240 = 956$

46. (b); Total Balls = 8 +5 +6 =19 balls
Probability of getting all balls of same color
$= \frac{{}^{8}c_3 + {}^{5}c_3 + {}^{6}c_3}{{}^{19}c_3}$
$= \frac{\left(\frac{8\times7\times6}{3\times2\times1} + \frac{5\times4}{2\times1} + \frac{6\times5\times4}{3\times2\times1}\right)}{\frac{19\times18\times17}{3\times2\times1}} = \frac{86}{969}$
Required probability = $1 - \frac{86}{969} = \frac{883}{969}$

47. (c); Let suresh's age at the time of his marriage be x yrs
Therefore, Suresh's present age $= \frac{3}{2}$ x yrs
Also, Suresh's present age = (x +14) yr
$\frac{3}{2}x = x + 14$
$\frac{3}{2}x - x = 14$
x = 28 years
His son's age $= \frac{1}{3}$ of $\frac{3}{2}x = \frac{x}{2} = \frac{28}{2} = 14$ yrs

48. (c); Here, perimeter of the square = 88 cm (given)
Side of the square $= \frac{88}{4} = 22$ cm
Area of the square= $a^2 = (22)^2 = 484$ cm^2
As it is given that area of equilateral triangle is equal to the area of the square
So, the area of the equilateral triangle is 484 cm^2

49. (e); Let the time take by A,B and C alone be A days, B days and C days respectively.
ATQ, $2\left(\frac{1}{A} + \frac{1}{B}\right) + \frac{34}{5} \times \left(\frac{1}{A} + \frac{1}{B} + \frac{1}{C}\right) = 1$
$2\left(\frac{1}{24} + \frac{1}{B}\right) + \frac{34}{5} \times \frac{1}{8} = 1$
$\frac{1}{12} + \frac{2}{B} = \frac{3}{20}$
$\frac{2}{B} = \frac{3}{20} - \frac{1}{12}$
$\frac{2}{B} = \frac{9-5}{60}$
$\frac{2}{B} = \frac{4}{60}$
B = 30 days

50. (b); Ratio of Milk and water in mixture = 60 : 40
= 3 : 2
Quantity of Milk left in mixture after 20 gm of mixture is taken out $= 60 \times \frac{3}{5} = 36$ gm.
Quantity of water left $= 60 \times \frac{2}{5} = 24$ gm
∴ Required ratio $= \frac{36}{24+6} = 6 : 5$

51. (d); Ratio of amount invested by P, Q and R = 8 : 6 : 9
A : B : C
$8 \times 12 : 6 \times 5 + 10 \times 7 : 9 \times 12$
96 : 100 : 108
Ratio of their profit shares
A : B : C
24 : 25 : 27
Profit share of B $= \frac{1350}{27-24} \times 25 =$ Rs. 11,250

Solutions (52–56):

Day	Quantity of wet waste	Ratio of wet to dry waste	Difference between dry and wet waste. (wet>dry)	Dry waste
Mon	100 kg	5 : 4	20 kg	80 kg
Tue	110 kg	5 : 4	22 kg	88 kg
Wed	99 kg	9 : 7	22 kg	77 kg
Thu	84 kg	7 : 5	24 kg	60 kg
Fri	96 kg	12 : 7	40 kg	56 kg

The above table is formed by calculating all the missing data as per instructions

52. (d); On Wednesday the truck picks only 80% of the waste of his capacity
Therefore, waste picked on Wednesday
$= 180 \times \frac{80}{100} = 144$ kg
Quantity of wet waste picked = 99 kg
Quantity of dry waste picked = 144 – 99 = 45 kg
Required difference = 99 – 45 = 54 kg

53. (b); As on Thursday, Quantity of wet waste is 84 kg and the difference between wet waste and dry waste is 24 kg (Given)
Quantity of Dry waste= 84 -24 = 60 kg
As in the question, the ratio of wet waste and dry waste is 7 : y (Given)
ATQ, $\frac{84}{60} = \frac{7}{y}$
Therefore, y $= \frac{60}{12} = 5$

54. (e); Total dry waste produced on Monday, Tuesday and Friday together= 80 + 88 + 56 = 224 kg
Total wet waste produced on Wednesday and Thursday together = 99 +84 = 183 kg
Required ratio = 224:183

55. (c); Total amount of waste left by the end of the Wednesday
= (180 – 180) + (198 -180) +(176 -180)
= (0 + 18 – 4) = 14 kg

56. (c); Total quantity of dry waste taken on all the 5 days together = 80 + 88 + 77 + 60 + 56 = 361 kg

57. (a); Here, the pattern followed is
300 + (3^3 - 3)= 324
324 + (4^3 - 4)= 384
384 + (5^3 - 5)= 504
504 + (6^3 - 6)= 714 =P
714 + (7^3 - 7)= 1050
The next two series given follows the same pattern as above series
And according to that pattern, the value of Q and R are 534 and 614 respectively
Here, P > Q < R

58. (c); Here, the pattern followed is
2700 × 2 =5400
5400 ÷ 3 =1800 = P
1800 × 4 =7200
7200 ÷ 5 =1440
1440 × 6 =8640
The given next two series follows the same pattern as above series
And according to that pattern, the value of Q and R are 4200 and 4000 respectively
Here, P < Q > R

59. (d); Here, the pattern followed is
35 × 2 =70
70 × 3 =210
210 × 4 =840 =P
840 × 5 =4200
4200 × 6 =25200
The next two series follows the same pattern as above series
And according to that pattern, the value of Q and R are 840 and 960 respectively
Here, P = Q < R

60. (c); Here, the pattern followed is
(7 × 2) + 1=15
(15 × 3)+2= 47
(47 × 4)+3= 191
(191 × 5)+4= 959 =Q
(959 × 6)+5= 5759
The next two series follows the same pattern as above series
And according to that pattern, the value of P and R are 239 and 1439 respectively
Here, P < Q < R

61. (c); **I.** $2x^2 + 11x + 12 = 0$
$2x^2 + 8x + 3x + 12 = 0$
$2x(x + 4) + 3(x + 4) = 0$
$(x + 4)(2x + 3) = 0$
$x = -4, -\frac{3}{2}$

II. $8y^2 - 22y - 21 = 0$
$8y^2 + 6y - 28y - 21 = 0$
$2y(4y+3) - 7(4y+3) = 0$
$(2y-7)(4y+3) = 0$
$y = \frac{7}{2}, -\frac{3}{4}$
So, x < y

62. (a); **I.** $x^2 - 17x - 60 = 0$
$x^2 - 20x + 3x - 60 = 0$
$x(x-20) + 3(x-20) = 0$
$(x+3)(x-20) = 0$
$x = -3, 20$

II. $y^2 + 42y + 185 = 0$
$y^2 + 37y + 5y + 185 = 0$
$y(y+37) + 5(y+37) = 0$
$(y+5)(y+37) = 0$
$y = -5, -37$
So, x > y

63. (c); **I.** $x^2 + 41x + 420 = 0$
$x^2 + 21x + 20x + 420 = 0$
$x(x+21) + 20(x+21) = 0$
$(x+20)(x+21) = 0$
$x = -20, -21$

II. $6y^2 - 11y - 10 = 0$
$6y^2 - 15y + 4y - 10 = 0$
$3y(2y-5) + 2(2y-5) = 0$
$(2y-5)(3y+2) = 0$
$y = \frac{5}{2}, -\frac{2}{3}$
So, x < y

64. (e); **I.** $x^2 - 8x - 273 = 0$
$x^2 - 21x + 13x - 273 = 0$
$x(x-21) + 13(x-21) = 0$
$(x+13)(x-21) = 0$
$x = -13, 21$

II. $y^2 + 6y - 432 = 0$
$y^2 + 24y - 18y - 432 = 0$
$y(y+24) - 18(y+24) = 0$
$(y-18)(y+24) = 0$
$y = 18, -24$
So, No relation

65. (b); Total fees of Doctor C per patient
= 1500 + 1500× $\frac{20}{100}$ =Rs 1800
Total fees received by Doctor C = 1800 × 88
= Rs 158400
Total fees of Doctor D per patient
= 1500 + 1500× $\frac{20}{100}$ = Rs 1800
Total fees received by Doctor D = 1800 × 112
= Rs 201600
Required difference = 201600 – 158400
= Rs 43200

66. (c); Total fees of Doctor A per patient
= 1000 + 1000× $\frac{15}{100}$ =Rs 1150
Total fees received by Doctor A = 1150 × 100 =115000 Rs
Total fees of Doctor E per patient
= 2000 + 2000× $\frac{25}{100}$ =Rs 2500
Total fees received by Doctor E = 2500 × 60 = 150000 Rs
Required ratio =$\frac{115000}{150000}$ = 23 : 30

67. (a); Total fees of Doctor B per patient
= 1000 + 1000× $\frac{15}{100}$ =Rs 1150
Total fees received by Doctor B = 1150 × 40 = 46000 Rs
Total fees of Doctor E per patient
= 2000 + 2000× $\frac{25}{100}$ =Rs 2500
Total fees received by Doctor E = 2500 × 60 = 150000 Rs
Required percentage = $\frac{150000-46000}{150000}$ × 100
= 69 $\frac{1}{3}$%

68. (a); Current fees of Doctor E per patients =Rs 2500
Increased fees of Doctor E per patients
= 2500 + 2500 × $\frac{15}{100}$ =Rs 2875
Total fees received by Doctor E (after fees increase) = 2875 × 60 =Rs 172500

69. (c); Total fees of Junior Doctor per patient
= 1000 + 1000× $\frac{15}{100}$ = Rs 1150
Total fees of Senior Doctor per patient
= 1500 + 1500 × $\frac{20}{100}$ = Rs 1800
Fees received by both junior doctor and senior doctor together = (100+40) × 1150 + (112+88) × 1800= 161000 + 360000 =521000
Required average = $\frac{521000}{4}$ = Rs 130250

Solutions (70-74): As given, at station A ,80 person board and the ratio of male to female is 9: 7, therefore there will be 45 male and 35 female.
Then at station B,15 men got down and 5 women board the train, therefore total men at station B be 30 and total female is 40.
Then at station C, half of the women got down and same no. of men boarded the train, then total male will be 50 and total female will be 20.
Finally at station D, x no. of male got down and ratio of male to female is 7 : 4, then total no. of male will be 35 and total female will be 20

STATION	Male	Female
A	45	35
B	30	40
C	50	20
D	50 – x = 35	20

70. (b); Total males who does not have a valid ticket from Station B to C = 30 × $\frac{50}{100}$ =15
Total females who does not have a valid ticket from Station B to C = 40 × $\frac{60}{100}$ =24
Total invalid ticket travellers from Station B to C = 15 +24 = 39

71. (d); Total no. of females travelling from station B to C = 40
Total no. of males travelling from station D to E = 35
Required percentage = $\frac{40-35}{35}$ × 100 =14.28% =14%(approx.)

72. (a); Total no. of passengers travelling at starting point= 45+35=80
Total no. of passengers travelling till destination point =35 +20 =55
Required difference =80 -55 =25

73. (c); In Statement A,
Total no. of females travelling from station A to B = 35
Total no. of males travelling from station D to E = 35
Therefore, Statement A is true
In Statement B,
Total no. of passengers travelling from station C to D =70
Total no. of males who boarded from the starting point =45
Therefore, Statement B is false
In Statement C,
Difference between no. of males and females travelling from station D to E =35 -20 =15
Difference between no. of males and females travelling from station C to D = 50 -20 =30
Therefore, statement C is true
Therefore Statement A and C is true

74. (b); total no. of passengers travelling from station D to E= 35 +20=55
total no. of passengers travelling from station B to C = 30+40=70
Required ratio = $\frac{55}{70}$=11: 14

75. (c); Relative speed of car =64 + 86 = 150 km/hr
Distance travelled by Car P in 3 hrs = 64 × 3 = 192 km
Remaining distance =792 -192=600 km
Time taken to cover remaining distance where they will meet each other =$\frac{600}{150}$=4 hrs
Distance travelled by Car Q from station B in 4 hrs = 86 × 4 = 344 km

76. (b);

A	:	B	:	C
5500 × 12 + 4500× 24		4500 × 12 + 5000× 24		6000 × 36
=		=		=
29	:	29	:	36

Profit share of C = 9400 × $\frac{36}{94}$ = Rs 3600

77. (a); **Quantity I:** Let SP of one apple be 1 rs
SP of 15 apple = 15 rs
And profit = 2 rs
CP = 15 -2 =13 rs.
% Profit = $\frac{2}{13}$ × 100 =15.38 %
Quantity II: 625 =125%
Therefore, 425 =$\frac{125}{625}$ × 435 = 87%
Loss % = 100 – 87=13 %
Hence, Quantity I > Quantity II

78. (c); Let length of the platform be x metres
Speed of the train = 54 × $\frac{5}{18}$ =15 m/s
According to the question, train takes 12 sec to cross a man on the platform
So, length of the train =12 × 15 =180 m
Again, Time taken by train to cross the platform = 25 sec
Length of the platform = 25 × 15 – 180
= 375 – 180 =195 m
Hence, Quantity I < Quantity II

79. (c); P : Q = 2:1 (efficiency ratio)
(P+Q) : R = 3 : 1 (efficiency ratio)
Thus, P : Q : R = 2: 1: 1 (efficiency ratio)
Now total work = $\frac{15}{2}$ × 4= 30 units
Quantity I: Time taken by P and Q together to complete the work = $\frac{30}{3}$ = 10 days
Quantity II: Time taken by Q and R together to complete the work = $\frac{30}{2}$ = 15 days
Hence, Quantity I < Quantity II

80. (a); Shikhar Manan Rohit Krunal
100 150 150 × $\frac{80}{100}$ =120 120 × $\frac{90}{100}$=108
50 75 60 54
Quantity I:
Required percentage =$\frac{60-50}{50}$ × 100 =20 %
Quantity II: $\frac{54-50}{50}$ × 100= 8%
Hence, Quantity I > Quantity II

ENGLISH LANGUAGE

81. (c); Among the given words, alternatives (I) and (IV) suitably fit in the blank and form a grammatically correct and contextually coherent sentence. All the other words fail to adhere, either the grammatical syntax or the context of the sentence. Hence, option (c) is the most suitable answer choice.
Penury means the state of being very poor; extreme poverty.
Mansion means a large, impressive house.
Grandeur means splendour and impressiveness, especially of appearance or style.
Poverty means the state of being extremely poor.

82. (d); Among the given words, alternatives (I) and (II) suitably fit in the blank and form a grammatically correct and contextually coherent sentence. All the other words fail to adhere, either the grammatical syntax or the context of the sentence. Hence, option (d) is the most suitable answer choice.
Alleviate means make (suffering, deficiency, or a problem) less severe.
Aggravate means make (a problem, injury, or offence) worse or more serious.

83. (b); Among the given words, alternatives (I), (III) and (IV) suitably fit the blank and form a grammatically correct and contextually coherent sentence. All the other words fail to adhere, either the grammatical syntax or the context of the sentence. Hence, option (b) is the most suitable answer choice.
Benevolent means well-meaning and kindly.
Apathetic means showing or feeling no interest, enthusiasm, or concern.
Passive means accepting or allowing what happens or what others do, without active response or resistance.
Indifferent means having no particular interest or sympathy; unconcerned.

84. (a); Among the given words, only alternative (III) suitably fits in the blank and form a grammatically correct and contextually coherent sentence. All the other words fail to adhere, either the grammatical syntax or the context of the sentence. Hence, option (a) is the most suitable answer choice.
Abundant means existing or available in large quantities; plentiful.
Pernicious means having a harmful effect, especially in a gradual or subtle way.
Placid means not easily upset or excited.
Injurious means causing or likely to cause damage or harm.

85. (e); All the given words suitably fit in the blank forming a grammatically correct and contextually coherent sentence. Hence, option (e) is the most suitable answer choice.
Achieved means successfully bring about or reach (a desired objective or result) by effort, skill, or courage.
Accomplished means achieve or complete successfully.
Gained means obtain or secure (something wanted or desirable).
Attained means succeed in achieving (something that one has worked for).

86. (d); IL&FS has appointed advisers to prepare a resolution plan, (C) and (E) makes a perfect match.
The company along with its subsidiaries is facing a liquidity crisis, (A) and (F) makes a perfect match.

87. (d); For big companies, there are instances of even the infrastructure getting damaged, Sentence (C) and (F) makes proper combination as a sentence. The increase in MSP for rabi crops comes just ahead of the RBI monetary policy announcement, (A) and (E) makes the perfect match as in sentence.

88. (c); Only sentence (A) and (D) makes a perfect match as a sentence, India will be the third largest aviation market globally a year sooner.

89. (b); Only sentence (B) and (F) makes a perfect match as they both together states that "All the sectoral indices closed in the red, with 22 of the 30 Sensex stocks finishing lower."

90. (c); Only sentence (A) and (F) makes a perfect match as a sentence, "A writer needs quiet and peaceful environment around him in order to write."

91. (d); We can conclude from first paragraph of the passage that sentences (I) and (II) are in relevance with the passage. As mentioned in the paragraph that the goal is to create new industries, more employment and new markets. Sentence (III) is totally irrelevant in context to the passage.
Hence option (d) is the correct choice.
Refer the lines "The programme focuses on optimizing the efficiency of road traffic movement across the country by bridging critical infrastructure gaps through shorter routes. The end goal is to create economic corridors (ECs) along the path—new industries, more employment and new markets."

92. (d); Both (a) and (b) options are correct in context of the passage.
Existing road network got affected with implementation of Bharatmala Pariyojana. This programme affect the toll collection and thereby debt servicing ability. Hence option (d) is the correct choice. Sentence (c) is incorrect as it is not mentioned anywhere in the passage.
Refer the lines "The Bharatmala programme may result in traffic diversion from the existing road network to new roads, thereby affecting the toll collection and, consequently, the debt servicing ability of some of the BOT and OMT projects."
"Out of the 44 ECs, about 21 would partially or fully affect the existing alignments, while the remaining 23 that involve upgradation of existing alignment will not result in any deviation."

93. (c); The total debt at risk is Rs19,435 crore. It has mentioned in the passage that debt servicing ability has raised the risk of default on 25 national highway toll projects involving Rs19,435 crore of debt.
Hence option (c) is the most appropriate choice.
Refer the line of second paragraph "This has raised the risk of default on 25 national highway toll projects which involve Rs19,435 crore of debt."

94. (b); "Bharatmala and the rising debt issues" is an appropriate title of the passage.

95. (b); Refer the fourth paragraph of the passage in which it is clearly mentioned that the need of the hour is to realign the terms and conditions of the model concession agreement to ensure that banks do not end up accumulating NPAs .Now in the third paragraph, refer the lines "This could be ensured by allowing renegotiation of the terms of the concession agreement.". Hence option (b) is the correct choice. Sentence (I) is irrelevant here.

96. (c); 'do not turn' is the correct phrase to be replaced thus making the sentence grammatically correct. The sentence is in present tense 'are needed', 'are at risk' Hence 'could' and 'would' will not be used as they are past form of 'can' and 'will'. The subject of the sentence 'BOT projects' is plural hence, 'does' will not be used. Hence 'do not turn' is the correct choice making option (c) as correct.

97. (c); Curtail means reduce in extent or quantity; impose a restriction on. Hence (I), (II) and (III) are similar in meaning to Curtail.

98. (d); **Embarked** means begin (a course of action). Hence it has same meaning as commence, initiate and undertake.
Commence means begin.
Rot means decay or cause to decay.

99. (a); **Hindrance** means a thing that provides resistance, delay, or obstruction to something or someone. Hence it has opposite meaning as that to **impetus** which means something that makes a process or activity happen or happen more quickly.
Plausible means in a way that seems reasonable or probable.
Contrite means feeling or expressing remorse at recognition that one has done wrong.

100. (b); **Reluctant** means unwilling and hesitant; disinclined. Hence it has opposite meaning as **willing** and **eager**.
Splendid means magnificent, very impressive.
Vaunt means boast about or praise.

101. (a); 'Why do we not' will come in place of 'why we do not' as the sentence is in interrogative form.

102. (c); In place of 'he will have', 'he would have been' will be used.
With Had+ subject + been + V3, Subject + would + have + been + V3 is used.
Ex. **Had** he **been taken** to hospital, he **would have been** saved.

103. (b); Replace 'with' by 'in' as "take delight in something" is the correct usage.
e.g. She **takes delight in** dancing.

104. (b); 'hard' will be used in place of 'hardly' as 'hardly' is used to depict 'rarely' or 'scarcely' whereas here 'hard' means 'tough'.

105. (e); The sentence is grammatically correct.

106. (c); Drawing a hint from statement (A), it can be understood that the paragraph is describing about an alarming note issued by Former RBI Governor Raghuram Rajan regarding the cumulative bad-debts which can lead to financial crisis. Among the given sentences, only statement (B) is describing about the lack of professionalism on the part of Banks while issuing lo It is to be noted that sentence (B) begins with "Clearly" which is indicating that something similar in context should have been mentioned in the earlier statements. Since, none, of the statement can find relevance with statement (B), option (c) becomes are most suitable answer choice.

107. (b); Drawing a hint from statement (A), it can be understood that the paragraph is describing about an alarming note issued by Former RBI Governor Raghuram Rajan regarding the cumulative bad-debts which can lead to financial crisis. Statement (E) should logically follow statement (A) as it is further providing information on the note issued by him stating the three troubles that could be caused by increasing non-performing assets. Next should be statement (G), as it provides information on the troubles mentioned in statement (E). Since statement (C) provides data on the outstanding loan it should be following statement (G). Statement (F) provides information on the mudra loans mentioned in statement (C). Statement (H), quotes the problem and the solution to recover the small loans. Statement (D) coherently connects with statement (H) forming a meaningful paragraph. Among the given sentences, only statement (B) is describing about the lack of professionalism on the part of Banks while issuing loans. It is to be noted that sentence (B) begins with "Clearly" which is indicating that something similar in context should have been mentioned in the earlier statements. Therefore, statement (B) is incoherent. Thus the sequence formed is **AEGCFHD.** Since the last statement, statement (D) is describing about the problems associated with the banks to recover the loans, the next statement should option (b) as it is further describing about the risk if these small loans cumulatively form a huge amount. Sine all the other statements are incoherent, option (b) is the most suitable answer choice.

108. (e); Drawing a hint from statement (A), it can be understood that the paragraph is describing about an alarming note issued by Former RBI Governor Raghuram Rajan regarding the cumulative bad-debts which can lead to financial crisis. Statement (E) should logically follow statement (A) as it is further providing information on the note issued by him stating the three troubles that could be caused by increasing non-performing assets. Next should be statement (G), as it mentions all the three troubles mentioned in statement (E). Therefore, statements (E) and (G) form a logical pair. Hence, option (e) is the most suitable answer choice.

109. (a); Drawing a hint from statement (A), it can be understood that the paragraph is describing about an alarming note issued by Former RBI Governor Raghuram Rajan regarding the cumulative bad-debts which can lead to financial crisis. Statement (E) should logically follow statement (A) as it is further providing information on the note issued by him stating the three troubles that could be caused by increasing non-performing assets. Next should be statement (G), as it provides information on the troubles mentioned in statement (E). Since

statement (C) provides data on the outstanding loan it should be following statement (G). Statement (F) provides information on the mudra loans mentioned in statement (C). Statement (H), quotes the problem and the solution to recover the small loans. Statement (D) coherently connects with statement (H) forming a meaningful paragraph. Among the given sentences, only statement (B) is describing about the lack of professionalism on the part of Banks while issuing loans. It is to be noted that sentence (B) begins with "Clearly" which is indicating that something similar in context should have been mentioned in the earlier statements. Therefore, statement (B) is incoherent. Thus the sequence formed is **AEGCFHD.** Hence, option (a) is the most suitable answer choice.

110. (b); Drawing a hint from statement (A), it can be understood that the paragraph is describing about an alarming note issued by Former RBI Governor Raghuram Rajan regarding the cumulative bad-debts which can lead to financial crisis. The logical sequence of the sentences after rearrangement excluding the incoherent one is **AEGCFHD.** Since statement (C) is the fourth statement in the sequence, option (b) is the most suitable answer choice.

111. (d); '**absence'** is the correct word.
Desertion means abandonment, leaving.
Paucity means the presence of something in only small or insufficient quantities or amounts.
Sparsity means to scatter or spread.

112. (e); '**embedded'** is the correct word to be filled in the blank.
According to the theme of the paragraph, 'embedded' is the correct word.

113. (b); '**forms'** is the correct word.

114. (c); '**generation'** is the correct word.
As production is used in the sentence, hence we can get the idea that generation will be the answer.

115. (c); '**lost'** is the correct word.
Awed means filled with awe or wonder.
Misled means cause (someone) to have a wrong idea or impression.
Rapt means completely fascinated or absorbed by what one is seeing or hearing.

116. (a); '**feed'** is the correct word to be filled in the blank.
Organic wastes are useful for the use of small and affordable households.

117. (e); '**use'** is the correct word.

118. (c); "**prevent"** is the correct word.

119. (d); '**ingested'** is the correct word to be filled in the blank.
Ravaged means severely damaged.

120. (b); '**refuse'** is the correct word.
As refuse is also used elsewhere in the paragraph, we can get a hint.
Refuse means worthless and useless part of something.

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Part-VIII

REASONING ABILITY

Directions (1-5): Study the information carefully and answer the questions given below.

Seven persons A, B, C, D, E, F and G are born in different years 1950, 1953, 1961, 1968, 1972, 1985, 1996 but not necessarily in the same order. They are born on same date of the same month in different years. (All the calculations of ages are done by considering 2018 as the base year) They like different fruits i.e. grapes, litchi, fig, mango, guava, apple, pomegranate.

The sum of the present age of B and E is 90 years. The person who is 2nd eldest likes mango. C is younger to F. The sum of the present age of G and the one who likes guava is 103 years. Neither C nor A likes grapes and fig. The difference between the present ages of the one who likes guava and the one who likes fig is 11 years. The number of persons born before A is same as the number of persons born after the one who likes apple. The youngest person likes pomegranate. The sum of the present age of D and A is 115 years. A is younger to D. The one who likes litchi is older to the one who likes grapes. The number of persons born between the one who likes guava and grapes is more than the persons born between the ones who like grapes and litchi. G does not like fig and B is younger to E.

1. Who among the following likes fig?
(a) G (b) F (c) C
(d) B (e) none of these

2. Which among the following pair of persons are the oldest and youngest respectively?
(a) E, A (b) F, C (c) C, F
(d) B, D (e) none of these

3. In which of the following year was E born?
(a) 1968 (b) 1950 (c) 1961
(d) 1985 (e) none of these

4. Which of the following statement is true regarding F?
(a) E was born before F
(b) F is the youngest
(c) the difference between the present ages of G and F is divisible by 3
(d) F likes guava
(e) none of these

5. How many persons were born between A and E?
(a) Two (b) One (c) Three
(d) Four (e) None

6. **Statement:** The State Government has decided to declare 'Kala Azar' as a notifiable disease under the Epidemics Act. Family members or neighbours of the patient are liable to be punished in case they did not inform the State authorities.
Courses of action:
I. Efforts should be made to effectively implement the Act.
II. The cases of punishment should be propagated through mass media so that more people become aware of the stern actions.
(a) If only I follow
(b) If only II follow
(c) If either I or II follow
(d) If neither I nor II follow
(e) If both I and II follow

7. **Statement-** Two companies A and B signed a deal in which both have agreed to not disclose any confidential details of their company to the rivals.
Which of the following could be the reason of the legal notice sent by company B to company A for breaching the contract?
I. Company A is unlawfully receiving more amount of profit without indulging company B in it.
II. Company A is sharing the private data and details of company B for its own profit.
(a) Only I is implicit
(b) Only II is implicit
(c) Either I or II is implicit
(d) Neither I nor II is implicit
(e) Both I and II are implicit

Directions (8-12): Study the information carefully and answer the questions given below.

Ten people are seating on two parallel rows. P, Q, R, S and T are seating in row 1 and facing towards south. A, B, C, D and E are seating in row 2 and facing north. They like different Colors- pink, blue, black, yellow and orange. Two persons like same color such that one of them is in row 1 and the other is in row 2(i.e. both the persons who like Pink colour sit in different rows)

R sits second from one of the ends. The one who sits immediate right of R faces C. P sits right to T but not immediate right. The number of persons sitting to the left of C is same as the number of persons sitting to the right of T. D faces the one who likes yellow. The one who likes pink

in row 1 faces the one who sits 2nd to the left of the one who likes pink in row 2. Only one person sit between S and the one who likes orange. The one who likes black sits 3rd to the left of the one who likes pink in row 2. More than two person sits between D and A. E does not like pink. C likes yellow. R does not like orange and pink. S faces the one who likes blue. The one who likes yellow sits immediate left to R. P does not like black.

8. Who among the following likes blue in row 1?
(a) P (b) Q (c) R
(d) S (e) none of these

9. How many persons sit between E and the one who likes black?
(a) Two (b) One (c) Three
(d) Four (e) None

10. Which of the following statement is true regarding S?
(a) E faces S
(b) A likes same color as S
(c) D faces S
(d) B sits 3rd left to the one who faces S
(e) none of these

11. Which of the following color is liked by R?
(a) blue (b) black (c) orange
(d) yellow (e) none of these

12. Four of the following belongs to a group based on their seating arrangement find the one that does not belong to that group?
(a) T (b) C (c) R
(d) B (e) A

Directions (13-16): Study the information carefully and answer the questions given below.

A person starts walking from A towards to reach B, which is 15m east to A. He then takes a right turn and walks 20 m to reach point C. From C, he takes left turn and walks15m to point D, then again he takes a left turn and walks 10m to point E. From E, he takes a left turn and walks 20m to reach point F. He then takes a right turn and walks 5m to reach G and finally takes a left turn to reach point H, which is 10 m away from G.

13. If J is 5m north to G, then what is the distance between A and J?
(a) 5m (b) 10m (c) 15m
(d) 20m (e) none of these

14. Four of the following five belongs to a group based on their directions find the one that does not belong to that group?
(a) A, G (b) F, C (c) B, D
(d) H, F (e) D, E

15. How far is point A from point H?
(a) 5m (b) 10m (c) 15m
(d) 20m (e) none of these

16. Which of the following is the nearest point to X, which is the mid-point of BC?
(a) E (b) F (c) C
(d) B (e) H

17. If in the number 68942735, 1 is added to second, fourth, sixth and eighth digit and 1 is subtracted from the first, third, fifth and seventh digits, then how many digits are repeated in the new number thus formed?
(a) 5 and 9 (b) 5 and 8 (c) 6, 5 and 8
(d) 9, 1 and 3 (e) None of these

18. Which alphabet is 3rd from the left in the meaningful four letter word formed from the first, second, seventh and eighth letter of the word PRODUCTION? If more than one word is formed then mark answer as X and no meaningful word is formed then mark answer as Z.
(a) T (b) X (c) P
(d) Z (e)

Directions (19-23): Study the following information carefully and answer the given questions.

Nine persons A, B, C, D, E, F, G, H, I like different flowers tulip, lily, rose, lotus, sunflower, orchid, iris, Tithonian and Cosmos also each of them live in three different cities Patna, Surat and Mumbai. Not less than two and not more than four live in same cities.

G lives with only the one who likes tulip. B lives with H and the one who likes Lotus D and F lives with the one who likes Sunflower. The one who likes Tithonian does not lives in Surat. The one who likes Lily and the one who likes Orchid live in the same city but not in Patna. Neither A nor H likes Tithonian. The one who likes Iris lives with A and I. E lives in Surat but does not like Lily. G does not live in Patna. H does not like Iris. A does not like Rose and Lotus. D does not like Orchid. The one who like Rose and the one who like Cosmos live in same city. Neither A nor I likes Sunflower.

19. Who among the following like Tulip?
(a) C (b) H (c) B
(d) F (e) None of these

20. In Which of the following city D and E live respectively?
(a) Mumbai and Surat
(b) Both in Patna
(c) Patna and Surat
(d) Both in Surat
(e) None of these

21. A likes which of the following flower?
(a) Lily (b) Tithonian (c) Cosmos
(d) Orchid (e) None of these

22. Four of the following are alike in a certain way so form a group which of the following does not belong to that group?
(a) B (b) H (c) A
(d) F (e) I

23. C lives with which among the following?
(a) B and H (b) D, F and E (c) A, I and E
(d) Only G (e) None of these

Directions (24-25): In each question below is given a statement followed by two assumptions numbered I and II. You have to consider the statement and the following assumptions and decide which of the assumptions is implicit in the statement.
Give answer-
(a) If only assumption I is implicit.
(b) If only assumption II is implicit.
(c) If either I or II is implicit.
(d) If neither I nor II is implicit.
(e) If both I and II are implicit.

24. **Statement:** The 'M' Cooperative Housing Society has put up a notice at its gate that sales persons are not allowed inside the society.
Assumptions:
I. All the sales persons will stay away from the 'M' cooperative Housing Society.
II. The security guard posted at the gate may be able to stop the sales persons entering the society.

25. **Statement:** "If it does not rain throughout this month, most farmers would be in trouble this year."
Assumptions:
I. Timely rain is essential for farming.
II. Most farmers are generally dependent on rains.

Directions (26-30): Study the following information to answer the given questions:

A word and number arrangement machine when given an input line of words and numbers rearranges them following a particular rule. The following is an illustration of input and rearrangement.
Input: 78 former 44 quicker colder 65 taller outer 27 8
Step I: cold former 44 quicker 65 taller outer 27 8 79
Step II: 9 cold former 44 quicker 65 outer 27 79 tall
Step III: form 9 cold 44 quicker outer 27 79 tall 66
Step IV: 28 form 9 cold 44 quicker 79 tall 66 out
Step V: quick 28 form 9 cold 79 tall 66 out 45
Step V is the last step of the rearrangement. As per the rules followed in the above steps, find out in each of the following questions the appropriate steps for the given input.
Input: warmer 76 94 scraper locker 11 greater 52 39 adopter

26. How many steps would be needed to complete the arrangement?
(a) IV (b) V (c) VII
(d) VI (e) None of these

27. What will the addition of the numbers which is third from the right end in step II and 2nd from the right end in step IV?
(a) 112 (b) 210 (c) 151
(d) 116 (e) None of these

28. Which of the following would be the difference of the numbers which is 3rd from left end in step IV and 2nd from right end in Step II?
(a) 90 (b) 83 (c) 25
(d) 10 (e) None of these

29. Which of the following element will be 6th to the left of 3rd from the right end in step V?
(a) 95 (b) adopt (c) 40
(d) scrap (e) None of these

30. In which of the following step '39 95 warm' would be find in the same order?
(a) Step V
(b) Step II and III
(c) Step II
(d) Step III and IV
(e) None of these

Directions (31-35): Study the following information carefully and answer the given questions.

Seven members of a family are sitting in a row facing north. G is third from one of the ends. G's mother is second to the right of G. G's wife is immediate left of G. M is an immediate neighbour of G's mother. B is third to the left of M. Only one person sit between D and M. D's father sit second to the left of D. Only one person sit between L's daughter and M. B is a male. B's father is third to the left of L's daughter. V is D's son and Q is daughter-in-law of L. Q sits to the left of L.

31. How many persons are sitting between Q and L?
(a) One
(b) Three
(c) More than three
(d) Two
(e) None

32. How many persons sit to the left of L?
(a) One
(b) Three
(c) More than three
(d) Two
(e) None

33. Who among the following is the grandson of M?
(a) D and B (b) L (c) V and B
(d) Q and D (e) D

34. How is D related to G?
(a) Sister (b) Brother (c) Mother
(d) Father (e) Sister-in-law

35. Who among the following sit forth to the right of B's father?
(a) M (b) L (c) V
(d) Q (e) D

Directions (36-38): Each of the questions below consists of a question and two statements numbered I and II given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and;

(a) if the data in statement I alone are sufficient to answer the question, while the data in statement II alone are not sufficient to answer the question.
(b) if the data in statement II alone are sufficient to answer the question, while the data in statement I alone are not sufficient to answer the question.
(c) if the data either in statement I alone or in statement II alone are sufficient to answer the question.
(d) if the data even in both statements I and II together are not sufficient to answer the question.
(e) if the data in both statements I and II together are necessary to answer the question

36. In a family of six persons who is the father of E?
I. C is the son-in-law of B. A is the only son of D. D is the grandmother of E.
II. E is the son of X, who is the only sister of A. B is the father of X.

37. Five persons are sitting around a circular table facing the center. Who among the following sit immediate left of C?
I. B sits second to the right of D. A second to the right of B. Two persons sit between D and E.
II. D sits second to the left of B. E is not an immediate neighbour of D. C is second to the left of E.

38. Six persons P, Q, R, S, T, U were born in six different months January, March, May, July, August and October of a year. Only one person was born in one month. Who among the following born in a month immediately before T?
I. P was born after July. Only one person born between S and P. Q was born immediately before P. R was born after P. T was born before S.
II. S was born in May. P was born after S. Only two person were born between P and T.

Direction (39-40): Statement- The CMC products are quite popular and has been commonly used by the people of city X, as it became so popular among the people who are getting health benefits from it. But recently we have seen a sudden decline in the demand of the products.

39. Which of the following can be concluded from the given statement?
(a) The CMC products are not so popular in city Y.
(b) The CMC products with so many health benefits are very famous and in regular use by the people of city X.
(c) The quality of the products is not that good as it was initially of the CMC products.
(d) A rival company which has come up with its product with lower price are becoming popular among the people of city X.
(e) The price of CMC products has been increased significantly in a decade.

40. Which of the following can be inferred about the decrease in demand of CMC products?
(I) The quality of products offered by CMC reduced which decreases the demand of the products.
(II) The prices are hiked of CMC products after seeing its popularity which in turn reduces its demand.
(III) The people of city X do not need the healthy products now.
(IV) The people of city X are now much more influenced with the foreign products, which affects the demand of CMC products.
(a) Only I and II
(b) Only III
(c) Only II and IV
(d) All of the above
(e) Only I

QUANTITATIVE APTITUDE

41. In a bag, there are 8 black balls and 12 yellow and green balls. If the probability of choosing a green ball from the bag is 0.35 then, find the probability of choosing two yellow balls from the bag if the ball chosen is not replaced.
(a) $\frac{2}{19}$ (b) $\frac{4}{95}$ (c) $\frac{1}{19}$
(d) $\frac{6}{95}$ (e) None of these

42. A hemisphere is mounted on cylinder and the radius of both is same i.e. 7 cm. Find the height of cylinder if the total volume of hemisphere and cylinder is $3952\frac{2}{3}$ cm^3.
(a) 21 cm (b) 14 cm (c) $17\frac{1}{2}$ cm
(d) 28 cm (e) None of these

Directions (43-47): The given table shows the number of classes taken by four different guest tutors (A, B, C and D) on different days in a week and honorarium paid to them for each class.

Tutors	Number of classes taken each on Monday, Tuesday and Wednesday	Number of class taken each on Thursday & Friday	Honorarium paid for each class (In Rs)
A	2	0	5000
B	3	—	8000
C	1	3	6000
D	2	2	4000

Note:
(i) Saturday and Sunday are Holiday.
(ii) '—' is missing value
(iii) Each class is of one hour.

43. Find the ratio of number of classes taken by A to the number of classes taken by D in a week?
(a) 4 : 5 (b) 3 : 5 (c) 2 : 3
(d) 9 : 10 (e) None of the above

44. Find the number of classes taken by C if he is paid an honorarium of Rs. 3.78 lakh for the completion of his course.
(a) 45 (b) 54 (c) 72
(d) 81 (e) 63

45. Find the difference between the honorarium paid to C, if he teaches for 3 weeks and the honorarium paid to D, if he teaches for 2 weeks?
(a) Rs. 82,000 (b) Rs. 74,000 (c) Rs. 88,000
(d) Rs. 90,000 (e) Rs.80,000

46. If honorarium paid to B for the completion of his course is Rs. 5.28 lakh and B takes 6 weeks for completion of his course then honorarium paid to B and D together in 2 weeks is approximately what percent of the honorarium paid to C in 4 weeks ?
(a) 105% (b) 110% (c) 114%
(d) 120% (e) 125%

47. If B takes no classes on Thursday and Friday in a particular week then honorarium paid to A is what percent of that of B in that week ?
(a) 38 ⅓% (b) 42 ⅓% (c) 41 ⅔%
(d) 45% (e) 46 ⅔%

48. 40 men together complete a work in 12 days while 12 women together complete that work in 48 days. All men started working together and on every next day 10 men left the work and after four days, 16 women joined to do the remaining work then find the time taken by 16 women to do the remaining work?
(a) 25 days (b) $22\frac{1}{2}$ days (c) 30 days
(d) $28\frac{1}{2}$ days (e) $32\frac{1}{2}$ days

49. A shopkeeper allows a discount of 30% on marked price of an article and customer also managed to get additional 10% discount on discounted price and in this way get a total discount of Rs.925. If shopkeeper incurs a loss of $12\frac{1}{2}$% on selling the article then find its cost price for the shopkeeper?
(a) Rs. 1600 (b) Rs. 1800 (c) Rs. 1500
(d) Rs. 1925 (e) Rs. 2050

50. A and B started a business by investing Rs. 10,000 and Rs. 9,000 respectively. But after 8 month, A and B both withdrew their whole amount and C joined the business with Rs. 12,000. If at the end of year, difference between profit share of A and B is Rs. 576. Then, find total profit earned in a year ?
(a) Rs. 13,800 (b) Rs. 14,250 (c) Rs. 14,400
(d) Rs. 14,950 (e) Rs. 15,500

Direction (51-55): Data given below shows total expense of a company in three different years.
2015 → Total salary expense of 80 employees is 10 lakhs
2016 → Total expense in this year is same as previous year while salary expense is increased by 26% as compared to previous year and average salary expense is decreased by Rs.500 as compared to previous year.
2017 → Total expense is 60 lakhs which is 20% more than that in 2016. Others expense is 47.5 lakhs. Number of employees is decreased by 5 as compared to previous year.
Total expense = Salary expense + Others expense
Salary expense = Number of employees × Average salary expense

51. Find the ratio between Others expense in 2015 to Salary expense in 2017?
(a) 1 : 4
(b) 4 : 1
(c) None of the given options
(d) 5 : 16
(e) 16 : 5

52. Avearage salary expense in 2015 is what percent less than that in 2017?
(a) None of the given options
(b) 10%
(c) 15%
(d) 5%
(e) 25%

53. If average employees in 2015, 2017 and 2018 is 82. Find number of employees in 2018?
(a) 86
(b) None of the given options
(c) 76
(d) 66
(e) 56

54. Female employees in 2016 is 45 more than male employees in 2016. Find the ratio between male to female employees in 2016?
(a) 11 : 9 (b) 5 : 2 (c) 2 : 5
(d) 9 : 11 (e) None of the given options

55. Find the difference between Salary expense in 2017 to Salary expense in 2016?
(a) 10,000 (b) 90,000 (c) 60,000
(d) 40,000 (e) None of the given options

Directions (56-60): In each question two equations numbered (I) and (II) are given. Student should solve both the equations and mark appropriate answer.

56. **I.** $x^3 = -512$
II. $2y^2 + 20y + 48 = 0$
(a) $x \geq y$
(b) no relation can be established between x and y.
(c) $x > y$
(d) $x < y$
(e) $x \leq y$

57. I. $x^2 + 47 = 72$
II. $(y - 2)^2 = 3(y - 2)$
(a) $x \leq y$
(b) $x > y$
(c) $x \geq y$
(d) $x < y$
(e) no relation can be established between x and y.

58. I. $2x^2 + 3x + 1 = 0$
II. $2 + \frac{1}{y} + y = 0$
(a) no relation can be established between x and y
(b) $x \geq y$
(c) $x \leq y$
(d) $x > y$
(e) $x < y$

59. I. $(x - 5)^2 = 16$
II. $y^2 + 8y = 84$
(a) $x \geq y$
(b) $x < y$
(c) no relation can be established between x and y
(d) $x > y$
(e) $x \leq y$

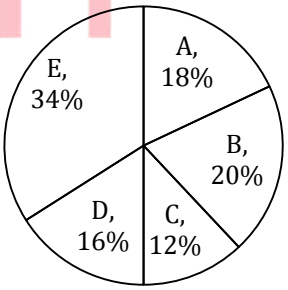
60. I. $2 - \frac{7}{x} + \frac{6}{x^2} = 0$
II. $\frac{15}{y^2} - \frac{22}{y} + 8 = 0$
(a) $x \leq y$
(b) $x > y$
(c) $x \geq y$
(d) no relation can be established between x and y
(e) $x < y$

61. Boat A travels $62\frac{1}{2}$ km in upstream in $2\frac{1}{2}$ hrs. The speed of another boat B in still water is 80% of the speed of boat A in downstream and the speed of stream for both boat A and B is same i.e. 2.5 km/hr. Find the distance travelled by boat B in upstream in 4 hours.
(a) 82 km (b) 86 km (c) 88 km
(d) 84 km (e) 94 km

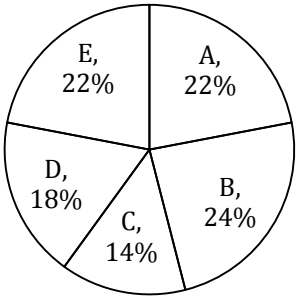
62. Ratio of A's age 4 years later to B's age 6 years later is 2 : 1. Another person C whose present age is twice the sum of present age of A and B together and after 4 years ratio of C's age to B's age is 23 : 4 then find the present age of B ?
(a) 16 years (b) 10 years (c) 15 years
(d) 12 years (e) 18 years

Direction (63-67): Pie charts given below shows number of tourists applied for visa from five different cities. First pie chart shows number of tourists applied for U.S.A + CANADA + ENGLAND while second pie chart shows number of tourists applied for U.S.A. Study the data carefully and answer the following questions.

Tourist (U.S.A + CANADA + ENGLAND) = 5500



Tourist (U.S.A) = 2500



63. Ratio between number of tourists applied for CANADA to ENGLAND is 57 : 29 from city D. Find number of tourists applied for CANADA from city D is **approximately** what percent of the total tourists applied for visa from city D?
(a) 28% (b) 32% (c) 54%
(d) 38% (e) 44%

64. Find the central angle of total tourists applied from city E?
(a) 129.6° (b) 112.4° (c) 115.2°
(d) 100.8° (e) 122.4°

65. Tourists applied for Canada from city A is 120 more than tourists applied for England from city A. Find total number of tourists applied for Canada from city A?
(a) 160
(b) None of the given options
(c) 180
(d) 280
(e) 260

66. Find the difference between number of tourists applied for Canada and England from city D and Number of tourists applied for Canada and England from city E?
(a) 880 (b) 990 (c) 890
(d) None of the given options (e) 790

67. Out of total tourist applied for U.S.A from city B and city E, 24% and 72% respectively went to U.S.A. Find the ratio between number of tourists went to U.S.A from city B to city E?
(a) 4 : 11
(b) None of the given options
(c) 5 : 22
(d) 7 : 11
(e) 6 : 11

68. A person invested in scheme A at X% per annum at SI for 5 years and in scheme B at 10% per annum for 2 years at CI. If the amount invested in both schemes are in the ratio of 2 : 5 (A : B) and the total interest received from both the schemes is 35% of the total amount invested together in both the schemes then find value of X ?
(a) 14% (b) 16% (c) 21%
(d) 28% (e) 35%

69. Ruchi's monthly salary is Rs. 60,000. She spends Rs. 12,000 on education of her child and Rs. X on her house rent. Further she spends $\frac{1}{7}$ and $\frac{1}{6}$ of the remaining amount on Food and shopping needs and the remaining Rs. 29,000 invested in some scheme. Then find the value of X.
(a) Rs. 7,000 (b) Rs. 13,000 (c) Rs. 16,000
(d) Rs. 6,000 (e) None of these

Directions (70-74): The following questions are accompanied by two statements I and II. You have to determine which statements (s) is / are sufficient / necessary to answer the questions.

70. If there are only three members (Father, Mother and Daughter) in the family then find the age of daughter?
I. If two years later the average age of all members of the family will be 28 years and six years ago average age of Father and Mother was 30 years.
II. If two years ago ratio of age of Father to that of Daughter is 9 : 1 and Father's present age is four years more than Mother's present age and sum of their ages is 72 years.
(a) Statement I alone is sufficient to answer the question but statement II alone is not sufficient to answer the question.
(b) Statement II alone is sufficient to answer the question but statement I alone is not sufficient to answer the question.
(c) Both the statements taken together are necessary to answer the questions, but neither of the statements alone is sufficient to answer the question.
(d) Either statement I or statement II by itself is sufficient to answer the question.
(e) Statements I and II taken together are not sufficient to answer the question.

71. Two persons Veer and Bhavya started a business by investing some amounts. Find investment of Veer.
I. Veer and Bhavya together invested Rs 9,000 in the business and Veer left after one year.
II. Bhavya invested Rs 2000 more next year and got profit share of Rs 3400 out of total profit Rs 5950.
(a) Statement I alone is sufficient to answer the question but statement II alone is not sufficient to answer the question.
(b) Statement II alone is sufficient to answer the question but statement I alone is not sufficient to answer the question.
(c) Both the statements taken together are necessary to answer the questions, but neither of the statements alone is sufficient to answer the question.
(d) Either statement I or statement II by itself is sufficient to answer the question.
(e) Statements I and II taken together are not sufficient to answer the question.

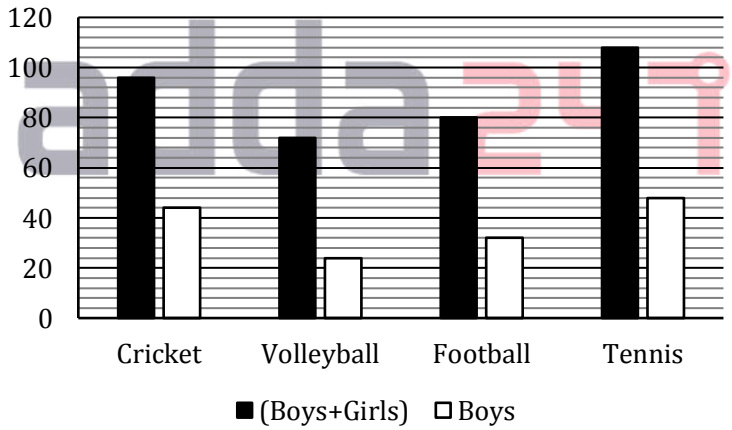
72. A person travels from point A to B and back from point B to A. Find average speed of the person during whole journey if distance between A to B is 100km.
I. Person takes 30 min more while coming back to the initial point.
II. Speed of person from A to B is $6\frac{2}{3}$ km /hr more than that of from B to A and ratio of time taken from A to B to that of B to A is 5 : 6.

(a) Statement I alone is sufficient to answer the question but statement II alone is not sufficient to answer the question.
(b) Statement II alone is sufficient to answer the question but statement I alone is not sufficient to answer the question.
(c) Both the statements taken together are necessary to answer the questions, but neither of the statements alone is sufficient to answer the question.
(d) Either statement I or statement II by itself is sufficient to answer the question.
(e) Statements I and II taken together are not sufficient to answer the question.

73. Find the rate of interest p.c.p.a (take rate of interest same for Simple interest and Compound interest)?
I. When Rs. 25,000 invested for 2 years at that rate of interest, then compound interest is Rs.250 more than simple interest.
II. After 10 years amount will be double if invested at Simple interest.
(a) Statement I alone is sufficient to answer the question but statement II alone is not sufficient to answer the question.
(b) Statement II alone is sufficient to answer the question but statement I alone is not sufficient to answer the question.
(c) Both the statements taken together are necessary to answer the questions, but neither of the statements alone is sufficient to answer the question.
(d) Either statement I or statement II by itself is sufficient to answer the question.
(e) Statements I and II taken together are not sufficient to answer the question.

74. Find time taken by A to cross B, if B has a head start of 30m and they run in same direction at same time?
I. Speed of B is twice of relative speed of A and B.
II. If B started 2 seconds earlier, then A took 16 seconds to cross B.
(a) Statement I alone is sufficient to answer the question but statement II alone is not sufficient to answer the question.
(b) Statement II alone is sufficient to answer the question but statement I alone is not sufficient to answer the question.
(c) Both the statements taken together are necessary to answer the questions, but neither of the statements alone is sufficient to answer the question.
(d) Either statement I or statement II by itself is sufficient to answer the question.
(e) Statements I and II taken together are not sufficient to answer the question.

Direction (75-79): Bar graph given below shows total students (Boys+Girls) who play four different games and number of boys who plays these games respectively. Study the data carefully and answer the following questions.



75. Find the ratio between total number of students (Boys+Girls) who play Cricket, Volleyball and Tennis to total number girls who play Volleyball and Football?
(a) None of the given options
(b) 21 : 8
(c) 23 : 16
(d) 23 : 8
(e) 21 : 16

76. Total number of boys who play Cricket and Football is how much less than total students (Boys+Girls) who play Football and Tennis?
(a) 112
(b) 116
(c) 118
(d) None of the given options
(e) 114

77. Total number of boys who play Volleyball and Tennis is what percent of the total girls who play same game?
(a) $33\frac{1}{3}\%$
(b) None of the given options
(c) $66\frac{2}{3}\%$
(d) 50%
(e) 25%

78. Out of total boys and girls play Football, 50% and $33\frac{1}{3}\%$ respectively qualified for nationals. Find total students (Boys+Girls) who were disqualified for nationals is what percent of total students (Boys+Girls) who play this game?
(a) 40%
(b) 60%
(c) 50%
(d) None of the given options
(e) 80%

79. Find the average number of girls who play Volleyball, Football and Tennis?
(a) 54
(b) 52
(c) None of the given options
(d) 56
(e) 50

80. A container contains 120 lit of pure milk. If X lit of pure milk is replaced with Y lit of water then ratio of milk to water becomes 20 : 1 and if 2X lit of pure milk were replaced by Y lit of water, then ratio of milk to water becomes 16 : 1. Find the value of **'X+Y'**?
(a) 20 (b) 25 (c) 24
(d) 30 (e) 16

ENGLISH LANGUAGE

Direction (81-90): Read the following passage carefully and answer the questions given below it. Certain words are given in bold to help you locate them while answering some of the questions.

Ayushman Bharat has been rolled out as a health protection scheme that will provide guaranteed access to treatment that is free at the point of delivery to about 40% of the population selected on the basis of **censured** socio-economic indicators. It is the essential first step on the road to universal health coverage, although it has been launched by the NDA government quite late in its term, possibly with an eye on the 2019 general election. Since the Centre has announced that 10.74 crore families identified through Socio-Economic Caste Census data will be given an annual Rs.5 lakh cover under the Pradhan Mantri Jan Arogya Yojana (the insurance component of the scheme), the question of eligibility appears settled. But the late start makes it virtually impossible for all those who are technically insured to **avail** the services that state agencies must make available, within a reasonable time-frame. And, the allocation of just Rs.2,000 crore during the current year to the PMJAY cannot provide the promised cover to the large population sought to be included. Not all States and Union Territories are in a position to raise their own share, and a few have not even joined the scheme. The challenge of funding, therefore, remains. And without adequate budgetary commitments, the implications of pooling the financial risk for such a large segment of the population through insurers or state-run trusts or societies make the outcomes uncertain.

Guaranteeing health-care access using private or public facilities presumes tight cost control. In the case of the PMJAY, this is to be achieved using defined treatment packages for which rates are prescribed. Costs are a contested area between the care-providers and the Centre, and many for-profit hospitals see the government's proposals as unviable. In the absence of adequate preparation, the Ayushman Bharat administration is talking of a rate review. More importantly, a lot of time has been lost in the NDA government's tenure, when State governments should have been persuaded to regulate the hospital sector under the Clinical Establishments (Registration and Regulation) Act, which dates back to 2010. The law broadly provides for standardization of facilities and reasonable rates for procedures. **Apprehensions** of fraud have prompted Ayushman Bharat administrators to announce that some key treatments should be availed through public sector institutions. But public facilities have been neglected for long. Going forward, there are some clear imperatives. It is essential to reduce the pressure on secondary and tertiary hospitals for expensive treatments by investing in preventive and primary care facilities. Here, the 150,000 health and wellness centres of the National Health Protection Mission can play a valuable role. The first-order priority should be to draw up a road map for universal health coverage, through continuous upgradation of the public sector infrastructure.

As Prime Minister Narendra Modi launched his government's ambitious healthcare scheme Ayushman Bharat on Sunday, five states remained unconvinced. Telangana, Odisha, Delhi, Kerala and Punjab have said they will not implement the programme till their concerns are addressed since they have better health assurance

schemes."Ayushman Bharat doesn't only provide financial support, but in the next 4 years it is **envisaged** that nearly 1.5 lakh next door wellness centres will be opened, which will provide free test facilities and treatment of simple ailments. Ayushman Bharat, dubbed as the world's largest government-funded healthcare scheme, is expected to benefit 50 crore citizens. Thirty-one states and union territories have agreed to implement the programme that will entitle nearly 10 crore economically backward families to health coverage of Rs. 5 lakh each.

The government is pursuing a holistic approach towards the betterment of the health sector. While it focuses on affordable healthcare on one hand, emphasis is also laid on preventive healthcare. The number of Ayushman Bharat beneficiaries is almost equal to the population of Canada, Mexico and the United States put together. NITI Aayog member Dr Vinod Paul said the scheme -- to be funded on a 60:40 ratio by the centre and state -- will come into effect from September 25, the birth anniversary of Rashtriya Swayamsevak Sangh ideologue Pandit Deendayal Upadhyay. Over 8,735 hospitals, both public and private, have been **empanelled** for the scheme, and as many as 31 states and union territories have signed MoUs with the Centre to implement the programme, a PTI report said.

81. What according to the author is possibly the reason for the launching of Ayushman Bharat by NDA government?
(a) Continuous upgradation of private sector infrastructure.
(b) Treatment to be availed through public sector institutions.
(c) To reduce the pressure on secondary and tertiary hospitals.
(d) The general elections of 2019.
(e) All of these

82. Why the outcomes of Ayushman Bharat scheme are portrayed as uncertain?
(a) As it requires standardization of facilities and reasonable rates for procedures.
(b) Due to a lack of budgetary support.
(c) Due to a viability in government's proposals.
(d) Since the government is pursuing a holistic approach towards the betterment of health sector.
(e) All of these.

83. In the passage, author has cited the law that imparts for normalization of facilities and reasonable rates for procedures. Which law is it?
(a) Pradhan Mantri Jan Arogya Yojana
(b) Consumer Protection Act and Medical Profession
(c) Clinical Establishments (Registration and Regulation) Act
(d) Drugs and Cosmetics Act, 1954
(e) The Pre Natal Diagnostic Techniques Act and Rules

84. What is/are the factor(s) that has influenced some of the states to not implement the Ayushman Bharat programme?
(a) That it is a world's largest government's funded healthcare scheme but withstands the financial risks.
(b) Because it has been launched by the NDA government quite late and that too not for the betterment of health sector.
(c) As the approach of this scheme is very diffused and fragmented.
(d) Since these states have better health insurance schemes.
(e) All of these.

85. Which of the statement is definitely false according to the passage?
(a) The outcomes of Ayushman Bharat Scheme are uncertain and there are implications of pooling the financial risk.
(b) Thirty-one states and union territories have agreed to implement the programme that will entitle nearly 10 crore economy.
(c) The pressure on secondary and tertiary hospitals for expensive treatments must be reduced by investing in preventive and primary care facilities.
(d) The main focus of government under Ayushman Bharat Scheme is only on affordable healthcare.
(e) None of these.

Directions (6-8): Choose the word which is most nearly the SAME in meaning as the word printed in bold as used in the passage.

86. Censured
(a) Approved (b) Acclaimed (c) Endorsed
(d) Condemned (e) Sanctioned

87. Avail
(a) Bruise (b) Afflict (c) Utilize
(d) Grieve (e) Mutilate

88. Apprehensions
(a) Anxiety (b) Axiom (c) Conviction
(d) Certitude (e) Verity

Directions (89-90) : Choose the word which is the OPPOSITE in meaning as the word printed in bold as used in the passage.

89. Envisaged
(a) Factual (b) Anticipate (c) Envision
(d) Foresee (e) Contemplate

90. Empanelled
(a) Enlisted (b) Enrolled (c) Constituted
(d) Allocated (e) Ousted

Directions (91-95): In each of the following questions, a sentence is given with four words given in bold. The word may be mis-spelt or grammatically or contextually incorrect. You have to choose the incorrect word as your answer. If all the words are correct, mark option (e). i.e. All are Correct as your answer.

91. The government is right to **supersede** the **broad** of Infrastructure Leasing & Financial Services (IL&FS), given the large size and **exposure** of insurance, mutual funds and provident funds to the **entity**.
(a) supersede (b) broad (c) exposure
(d) entity (e) All are correct

92. In 1994, Allison, who was then at the University of California, Berkeley, **reported** that CTLA-4, a protein present on T-cells, **derailed** the immune system's **assault** on cancer cells by acting as a **broke**.
(a) reported (b) derailed (c) assault
(d) broke (e) All are correct

93. Chile's experience was **miring** by faulty data-gathering, rules that **hampered** the trade in carbon emission permits/coupons, and **lackadaisical** monitoring and **enforcement** of emission limits by government authorities.
(a) miring (b) hampered (c) lackadaisical
(d) enforcement (e) All are correct

94. We **anticipate** that the rate hike will be **accompanied** by a change in the stance of monetary policy from **neutral** to withdrawal of **accomodation**.
(a) anticipate (b) accompanied (c) neutral
(d) accommodation (e) All are correct

95. Financial **inclusion** has the potential to become one of the most **robust** force multipliers that can **propel** the next growth revolution in India in the 21st century, **increasing** GDP by close to a percentage point, provided policymakers pull the right levers.
(a) inclusion (b) robust (c) propel
(d) increasing (e) All are correct

Directions (96 -102): In the following passage there are blanks, each of which has been numbered. These numbers are printed below the passage and against each, five words/phrases are suggested, one of which fits the blank appropriately. Find out the appropriate word/phrase in each case.

Police **____(96)____** water cannon and tear-gas shells to **____(97)____** thousands of farmers, affiliated to the Bhartiya Kisan Union (Tikait group), who tried to break through barricades to enter the national capital on the Delhi-U.P. border at Ghazipur on Tuesday morning, even as **____(98)____** negotiations between BKU leaders and Central Ministers failed to end the stand-off.

Prohibitory orders under Section 144 were issued and 3,000 police personnel **____(99)____** to ensure that the Kisan Kranti Yatra, which began from Tikait Ghat in Haridwar on September 23, was **____(100)____** from entering Delhi.

Violence erupted as a section of the farmers tried to **____(101)____** through the barricades using tractor-trolleys. As clashes broke out, the police used tear-gas and water cannon. Seven policemen and several protesters were injured.

Seeking to **____(102)____** the farmers to return, the government announced that a committee of Chief Ministers would investigate their demands. Home Minister Rajnath Singh held discussions with Union Agriculture Minister Radha Mohan Singh and other Ministers, after which Minister of State for Agriculture Gajendra Singh Shekhawat met the protesters to assure them that their demands would be investigated. BKU chief Naresh Tikait, however, said the farmers were "not satisfied" with the government's assurance.

96. (a) eroded (b) equivocated (c) fired
(d) deviated (e) chortled

97. (a) flay (b) disperse (c) zap
(d) gallop (e) amble

98. (a) belated (b) constructive (c) restless
(d) erroneous (e) erudite

99. (a) clambered (b) deployed (c) clenched
(d) bungled (e) belabor

100. (a) arrested (b) duped (c) collated
(d) doused (e) cogitated

101. (a) castigate (b) debase (c) dwindle
(d) decoy (e) break

102. (a) admonish (b) berate (c) abolish
(d) sway (e) camouflage

Directions (103 – 110): Read each sentence to find out whether there is any grammatical error in it. The error, if any, will be in one part of the sentence. The number of that part is the answer. If there is no error, the answer is (e). (ignore the errors of punctuation, if any.)

103. Often in political campaigns, a point is reached (a)/ at which the candidates (b)/ take out their gloves (c)/ and start slugging with bare fists. (d)/ no error. (e)

104. People are worried (a)/ more because of the frequency (b)/ of occurrence of the crime rather (c)/ than the magnitude of the crime. /(d). No error. (e)

105. The number of students (a)/ competing in the event (b)/ has been fallen (c)/ because of want of incentive. (d)/ No error. (e)

106. When he used to walk (a)/ along the road, (b)/ a wild and ferocious dog (c)/ knocked him down. (d)/ No error. (e)

107. Even very small reservoirs (a)/ impounding water seasonally (b)/ can cause deformation in (c)/ the neighbouring region.(d)/ No error (e)

108. Sometimes they may also show you (a)/ a fake flight ticket they booked just to meet you (b)/ but had to cancel because(c)/ of an urgent work or health issue(d)/. No error (e)

109. The idea of (a)/ introducing genes to correct (b)/ heritable and other disorders (c)/ are revolutionary. (d)/ No error (e)

110. The students requested their (a)/ Principal to be enough kind to (b)/ grant them five thousand rupees for (c)/ the reconstruction of the tennis court. (d)/ No error (e)

Directions (111-115): In each of the following sentences there are two blank spaces. Below each sentence there are five pairs of words denoted by numbers (a), (b), (c) ,(d) and (e). Find out which pair of words can be filled up in the blanks in the sentence in the same sequence to make the sentence grammatically correct and meaningfully complete.

111. Leisure must be spent carefully and _____ only, otherwise the devil will take the _____ of you.
(a) positively, care
(b) constructively, better
(c) pro-actively, though
(d) objectively, energy
(e) purposefully, measure

112. Nothing is impossible in the world of politics. States which were _____ foes and had their deadly missiles pointed at each other find themselves _____ in military alliances.
(a) implacable, partners
(b) incessant, capsized
(c) deadly, approaching
(d) known, soliciting
(e) clandestine, surreptitious

113. Inferring attitudes from expressed opinion has many_____. People may_____ their attitude and express socially acceptable opinions.
(a) limitations, conceal
(b) advantages, show
(c) drawbacks, support
(d) benefits, avoid
(e) reasons, acknowledge

114. We should move towards a system where the banks can_____ capital in the market with _____ safeguard so that they continue to be public sector banks.
(a) improve, proper
(b) strengthen, durable
(c) raise, adequate
(d) stimulate, effective
(e) provide, delicate

115. Governments in India seem to delight in arbitrary censorship under the _____ of _____ the public.
(a) garb, upholding
(b) pretext, protecting
(c) context, strengthening
(d) command, authorising
(e) guise, winning

Directions (116-120): In the following questions rearrange the sentences given to form a meaningful paragraph and choose the appropriate sequence of the coherent paragraph.

116. (A) This is primarily because of restrictive export policies (minimum export prices, export bans or export duties) and domestic marketing policies (due to the Essential Commodities Act, APMC, etc).
(B) The Producer Support Estimate (PSE) for India works out to be minus (-) 14 per cent of the gross farm receipts for the period 2000-01 to 2016-17.
(C) But a recent study, conducted jointly by the OECD and ICRIER, estimated that India's trade and marketing policies have inflicted a huge negative price burden upon the country's farmers.
(D) Most countries support agriculture to ensure food security and/or enhance farmers' income. India is no exception.
(E) The main policy instruments to support farmers in India include subsidised fertilisers, power, agri-credit and crop insurance on the input side, and minimum support prices for major crops on the output front.
(a) DEACB (b) BADEC (c) CDEAB
(d) ABCDE (e) DECBA

117. (A) Mountbatten parried him by telling that he would first go to meet the Maharaja, 'who was an old acquaintance'. The visit took place during June 18- 23.
(B) Mountbatten advised Hari Singh not to make the independence declaration.
(C) Gandhi met Mountbatten early in June, wanting to visit Kashmir instead of Nehru or 'prepare the way for Pandit Nehru'.
(D) However, Mountbatten's mission was a failure.
(E) He conveyed Patel's message that 'the States Department were prepared to give an assurance that, if Kashmir went to Pakistan, this would not be regarded as unfriendly by Government of India'.
(a) DEACB (b) BADEC (c) CABED
(d) ABCDE (e) DECBA

118. (A) While road dust and pollution from heavy vehicles are primarily responsible for the noxious pall that sets on Delhi and other urban centres, the burning of paddy stubble by farmers to clear their fields for the next crop is considered to be responsible for 20% of the smog.
(B) There is a 50% subsidy to farmers, and a 75% waiver to cooperative societies, agencies that rent out equipment, farmers' interest groups or gram panchayats to buy such machines.
(C) To address this, the Centre is partnering with Punjab, Haryana and Uttar Pradesh to provide farmers with a range of mechanised implements to clear their fields of paddy crop residue to prepare for sowing wheat.
(D) This year will be a crucial test for a scheme piloted by the Union government to address the winter haze.
(E) States have got nearly Rs.650 crore to help farmers buy subsidised equipment such as Happy Seeder, paddy straw choppers and Zero Till Drill.
(F) The onset of the winter season has come to be associated with toxic atmospheric pollution in north India.
(a) DEFACB (b) FDACBE (c) CABEDF
(d) ABCFDE (e) DFECBA

119. (A) The aim of the NHPS is to cover 10 crore families with medical insurance of Rs 5 lakh per household per year.
(B) The country's average out-of-pocket expenditure on healthcare is one of the highest globally, at 68%, and this means that of every Rs 100 spent by the public on healthcare, Rs 68 comes from their pocket.
(C) In comparison, the out-of-pocket expenditure is much lower in China, at 34%, and in the US it is 11%.
(D) With the announcement of the National Health Protection Scheme (NHPS), India has embarked on the path of universal health coverage.
(E) India, currently, has a highly inadequate social security structure, and the situation is especially dire in healthcare.
(a) CAEBD (b) BAEDC (c) ECDAB
(d) DAEBC (e) DABEC

120. (A) In fact, what's worrying is that some of these expensive plants may end up being liquidated because lenders would resist selling them at big haircuts, fearful of being questioned by the investigative agencies.
(B) What is more important, however, is that it won't really solve the issues faced by these plants and will, at most, help postpone the day of reckoning.
(C) Which is why union power minister RK Singh is trying to convince RBI it should provide lenders some forbearance for these assets.
(D) Whether the central bank will make exceptions for one sector is not clear.
(E) With over 40,000 MW of power plants already unviable for want of fuel or power purchase agreements (PPAs), and likely to be sold for a song if they turn into non-performing assets on banks' books and end up in the NCLT, it is understandable the government is seriously concerned.
(a) CAEBD (b) EACDB (c) AEBCD
(d) DAEBC (e) BCEDA

Solutions

REASONING ABILITY

Directions (1-5):

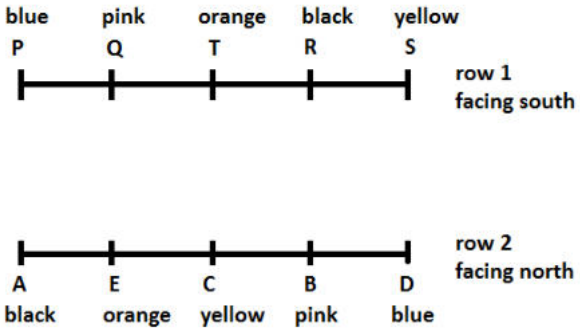
Year	Person	Fruit
1950	F	Fig
1953	D	Mango
1961	E	Guava
1968	A	Apple
1972	G	Litchi
1985	B	Grapes
1996	C	Pomegranate

1. (b); 2. (b); 3. (c);
4. (e); 5. (e);

6. (b); Only II is implicit as it is given in the statement that both the companies signed the contract for not revealing the details of their company with the rivals but company A may have done this and breached the contract, so the company B sent the legal notice to company A.

7. (e); The Act is aimed at eradication of the disease and so it needs to be proclaimed and promoted. So, both the courses follow.

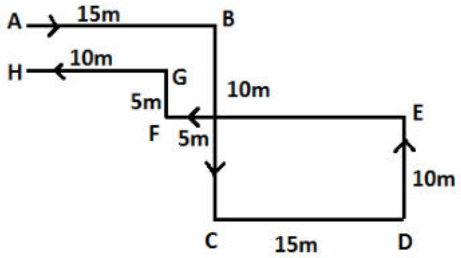
Directions (8-12):



8. (a); 9. (e); 10. (c);

11. (b); 12. (e);

Directions (13-16):



13. (b); 14. (e); 15. (a);

16. (b);

17. (b);

68942735

59851826

18. (e); From the first, second, seventh and eighth letter- P,R,T,I

The meaningful word is – TRIP.

Direction (19-23):

Persons	City	Flower
A	Patna	Cosmos
B	Patna	Iris
C	Mumbai	Tulip
D	Surat	Lily
E	Surat	Sunflower
F	Surat	Orchid
G	Mumbai	Tithonian
H	Patna	Rose
I	Patna	Lotus

19. (a); 20. (d); 21. (c);

22. (d); 23. (d);

Directions (24-25):

24. (e); As from the given statement we can assume that the notice on the gate of 'M' housing society will be followed by all the sales persons. Also it can be assumed that the security guards are not be able to stop so the requirement of notice is emerged. Since both the assumptions follow from the given statement, so both I and II are implicit.

25. (e); It is mentioned that farmers will be in trouble without rain. This means that timely rain is essential. Also, it shows that farmers are dependent on rain. So, both I and II are implicit.

Direction (26-30):

In the given input output, one word and one number is arranged in each step. In odd numbered steps such as I, III and V the word is getting arranged from the left end while the number is getting arranged from the right end. While in even numbered steps such as II and IV the numbers are arranged from the left end while the words are arranged from the right end. For step I- The word which is first according to the alphabetical order is arranged from the left end while the highest number is arranged from the right end and so on in the odd steps. For step II- The number which is lowest is arranged from the left end while the word which is last according to the alphabetical order is arranged from the right end and so on in even steps. Also while arranging each of the number is added by 1 and 'er' is removed from each word while arranging.

Input: warmer 76 94 scraper locker 11 greater 52 39 adopter

Step I: adopt warmer 76 scarper locker 11 greater 52 39 95

Step II: 12 adopt 76 scraper locker greater 52 39 95 warm

Step III: great 12 adopt scraper locker 52 39 95 warm 77

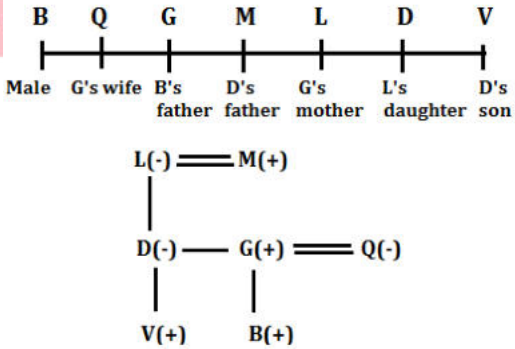
Step IV: 40 great 12 adopt locker 52 95 warm 77 scrap

Step V: lock 40 great 12 adopt 95 warm 77 scrap 53

26. (b); 27. (d); 28. (b);

29. (c); 30. (b);

Direction (31-35):

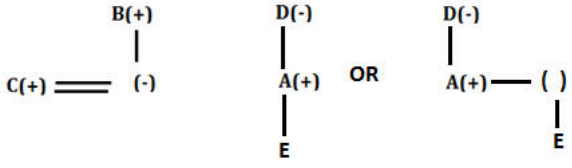


31. (d); 32. (c); 33. (c);

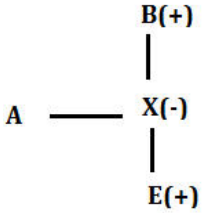
34. (a); 35. (c);

Direction (36-38):

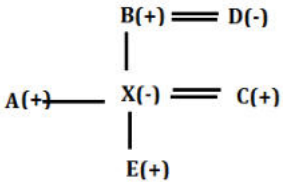
36. (e); From I,



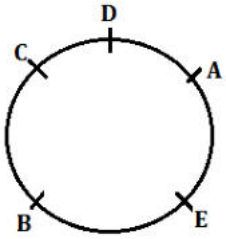
From II,



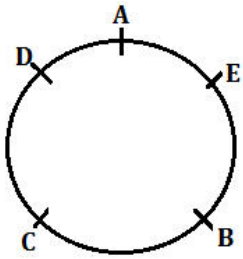
From I and II,



37. (c); From I,



From II,



38. (e); From I,

Months	Persons
January	T/
March	T/

May	S
July	Q
August	P
October	R

From II,

	Case-1	Case-2
Months	Persons	Persons
January	T	
March		T
May	S	S
July	P	
August		P
October		

From I and II,

Months	Persons
January	U
March	T
May	S
July	Q
August	P
October	R

39. (b); Only B is concluded from the given statement as it is given clearly in the statement that the CMC products are popular in city X but nothing is mentioned about city Y or the quality and prices of CMC products, so these can't be concluded. And also we cannot conclude anything about the rival companies.

40. (a); Both I and II can be inferred from the given statement as both the quality and price are the factors which can affect the demand so I and II can be inferred. But III and IV cannot be inferred as nothing is mentioned about the liking of people of city X for foreign products or their need of healthy products.

QUANTITATIVE APTITUDE

41. (c); Let the number of green balls be x.
Then, number of yellow balls = (12 – x)
ATQ,
$\frac{^{x}C_1}{^{20}C_1} = \frac{7}{20} \Rightarrow x = 7$
Number of yellow balls = 12 – 7 = 5
Required probability = $\frac{^{5}C_1}{^{20}C_1} \times \frac{^{4}C_1}{^{19}C_1} = \frac{1}{19}$

42. (a); $3952\frac{2}{3} = \frac{2}{3}\pi r^3 + \pi r^2 h$ (h = height of cylinder)
$\Rightarrow \frac{11858}{3} = \frac{2}{3} \times \frac{22}{7} \times 7 \times 7 \times 7 + \frac{22}{7} \times 7 \times 7 \times h$
$\Rightarrow h = 21$ cm.

43. (b); Required ratio = $\frac{6}{2\times3+2\times2} = \frac{6}{10} = 3 : 5$

44. (e); Required no. of classes = $\frac{9\times3.78\times1,00,000}{54000} = 63$

45. (a); Required difference = 9 × 6000 × 3 – 10 × 4000 × 2 = Rs. 82000

46. (d); Let number of classes taken by B on Thursday and Friday each be x.
ATQ,
(3 × 3 + 2x) × 6× 8000 = 5,28,000
$\Rightarrow x = 1$

Required % = $\frac{(22\times8000+20\times4000)}{36\times6000}\times100$
approximately =120%

47. (c); Honorarium paid to A = Rs. 6 × 5000 = Rs. 30,000
Honorarium paid to B (in that week) = Rs. 9 × 8000 = Rs. 72,000
Required % = $\frac{30000}{72000}\times100 = 41\frac{2}{3}\%$

48. (d); Let the efficiency of 1 man be M unit/day and that of 1 woman be W unit/day
ATQ,
40 × 12 × M = 12 × 48 × W.
$\Rightarrow \frac{M}{W}=\frac{6}{5}$
Let total work = 40 × 12 × 6 = 2880 units.
In 4 days, work done by men = (40×6 + 30×6 + 20×6 + 10×6) = 600 units.
On 5th day no men will be remaining and all the remaining work will be completed by womens
Remaining work = 2280 units.
Required time = $\frac{2280}{16\times5}$ = 28½ days.

49. (b); Let the MP be Rs. 100x
SP = $100x\times\frac{70}{100}\times\frac{90}{100} = 63x$
Discount = 100x – 63x = Rs. 925
$\Rightarrow$ x = 25
SP = 63 × 25 = Rs. 1575
Cost price for shopkeeper = $\frac{1575}{7}\times8$ = Rs. 1800

50. (c); Ratio of profit share of

A		B		C
10000 × 8		9000 × 8		12000 × 4
10	:	9	:	6

Total profit in a year = 25 × 576 = Rs. 14,400

Solution (51-55)

In 2015, Average salary expense = $\frac{10,00,000}{80} = 12,500$
In 2016, Average salary expense = $12,500 - 500 = 12,000$
Total expense in 2017 = 60 lakh
$\Rightarrow$ Total expense in 2016 and 2015 each = $\frac{100}{120}\times60,00,000 = 50,00,000 = 50$ lakh
Total salary expense in 2017 = $60 - 47.5 = 12.5$ lakh
Total salary expense in 2016 = $\frac{126}{100}\times10,00,000$
$= 12,60,000$
Number of employees in 2016 = $\frac{12,60,000}{12,000} = 105$
Number of employees in 2017 = $105 - 5 = 100$
In 2017, Average salary expense = $\frac{12,50,000}{100} = 12,500$

Year	Average salary expense	Number of employees	Salary Expense	Others expense	Total expense
2015	12,500	80	10 lakhs	40 lakhs	50lakhs
2016	12,000	105	12.6 lakhs	37.4 lakhs	50 lakhs
2017	12,500	100	12.5 lakhs	47.5 lakhs	60 lakhs

51. (e); Required ratio = $\frac{40}{12.5}=\frac{16}{5}$

52. (a); Required % = $\frac{12,500-12,500}{12,500}\times100 = 0\%$

53. (d); Number of employees in 2018 = $82\times3 - 100 - 80 = 246 - 100 - 80 = 66$

54. (c); Let total male employees in 2016 = y
$\Rightarrow$ Female employees in 2016 = y + 45
ATQ,
$y + y + 45 = 105 \quad \Rightarrow y = 30$
Total male employees in 2016 = 30
Female employees in 2016 = 75
Required ratio = $\frac{30}{75}=\frac{2}{5}$

55. (a); Required difference = 12.6 lakh − 12.5 lakh
= 0.1 lakh = 10,000

56. (d); **I.** $x^3 = -512$
$\Rightarrow x = -8$
II. $2y^2 + 20y + 48 = 0$
$\Rightarrow y^2 + 10y + 24 = 0$
$\Rightarrow y = -4$ or -6
$\therefore y > x$

57. (e); **I.** $x^2 = 25$
$x = \pm5$
II. $(y-2)^2 = 3(y-2)$
$\Rightarrow y^2 + 4 - 4y = 3y - 6$
$\Rightarrow y^2 - 7y + 10 = 0$
$\Rightarrow y = 2$ or 5.
$\therefore$ no relation can be established between x and y

58. (b); **I.** $2x^2 + 3x + 1 = 0$
$2x^2 + 2x + x + 1 = 0$
$(x+1)(2x+1) = 0$
$x = -1$ or $\frac{-1}{2}$

II. $2+\frac{1}{y}+y=0$
$\Rightarrow y^2+2y+1=0 \quad \Rightarrow y=-1$
$\therefore x \geq y$

59. (c); **I.** $(x-5)^2=16$
$\Rightarrow (x-5)=-4 \quad$ or $\quad (x-5)=4$
$\Rightarrow x=1 \quad$ or $\quad x=9$
II. $y^2+8y=84$
$\Rightarrow y^2+8y-84=0$
$\Rightarrow y^2+14y-6y-84=0$
$\Rightarrow y=-14$ or 6
$\therefore$ no relation can be established between x and y

60. (c); **I.** $2-\frac{7}{x}+\frac{6}{x^2}=0$
$\Rightarrow 2x^2-7x+6=0$
$\Rightarrow 2x^2-4x-3x+6=0$
$\Rightarrow 2x(x-2)-3(x-2)=2$
$\Rightarrow (2x-3)(x-2)=0$
$\Rightarrow x=3/2$ or 2
II. $\frac{15}{y^2}-\frac{22}{y}+8=0$
$\Rightarrow 8y^2-22y+15=0$
$\Rightarrow 8y^2-12y-10y+15=0$
$\Rightarrow 4y(2y-3)-5(2y-3)=0$
$\Rightarrow y=5/4$ or $3/2$
$\therefore x \geq y$

61. (b); Speed of boat A in upstream $=\frac{62.5}{2.5}=25$ km/hr
Speed of boat A in downstream $=25+2\times2.5$
$=30$ km/hr.
Speed of boat B in still water $=30\times\frac{80}{100}$
$=24$ km/hr
Required distance $=(24-2.5)\times4=86$ km

62. (d); Let the present age of A be x years.
and that of B be y years.
ATQ,
$\frac{x+4}{y+6}=\frac{2}{1}$
$\Rightarrow x+4=2y+12$
$\Rightarrow x-2y=8 \quad \ldots$ (i)
C's present age $=2(x+y)$ years.
$\frac{2(x+y)+4}{y+4}=\frac{23}{4}$
$\Rightarrow 8x+8y+16=23y+92$
$\Rightarrow 8x-15y=76 \quad \ldots$ (ii)
From (i) and (ii)
$y=12$ years.

63. (b); Number of tourists applied for Canada and England from city D $=5500\times\frac{16}{100}-2500\times\frac{18}{100}=880-450=430$
Number of tourists applied for Canada from city D $=430\times\frac{57}{86}=285$
Required % $=\frac{285}{880}\times100\approx32\%$

64. (e); Central angle of total tourists applied from city E $=34\times3.6=122.4°$

65. (d); Tourists applied for Canada and England from city A $=5500\times\frac{18}{100}-2500\times\frac{22}{100}=990-550$
$=440$
Let, Tourists applied for England from city A = y
Tourists applied for Canada from city A
$=y+120$
ATQ,
$y+y+120=440$
$2y=320$
$y=160$
Tourists applied for Canada from city A
$=160+120=280$

66. (c); Number of tourists applied for Canada and England from city D $=5500\times\frac{16}{100}-2500\times\frac{18}{100}=880-450=430$
Number of tourists applied for Canada and England from city E $=5500\times\frac{34}{100}-2500\times\frac{22}{100}=1870-550=1320$
Required difference $=1320-430=890$

67. (a); Required ratio $=\frac{24\%\text{ of }24\%\text{ of }2500}{72\%\text{ of }22\%\text{ of }2500}=\frac{24\times24\times2500}{72\times22\times2500}$
$=\frac{4}{11}$

68. (a); Let amount invested in scheme A be 2p and in scheme B be Rs. 5p.
Total interest received from both the schemes together
$=\frac{2p\times X\times5}{100}+5p\times\frac{21}{100}$
(Interest at 10% at CI in 2 years $=10+10+\frac{10\times10}{100}=21\%$)
ATQ,
$7p\times\frac{35}{100}=\frac{2p\times X\times5}{100}+\frac{5p\times21}{100} \quad \Rightarrow \quad X=14\%$

69. (d); Remaining amount $=60{,}000-(12000+X)$
$=(48{,}000-X)$
ATQ,
$(48000-X)\times\left(1-\frac{1}{7}-\frac{1}{6}\right)=29000$
$\Rightarrow (48000-X)\times\frac{29}{42}=29000$
$\Rightarrow X=$ Rs. 6000

70. (d); From I
Sum of present age of all the members $=28\times3-3\times2=78$ yr
Sum of age of Father and Mother
$=(30+6)\times2=72$ years
Age of daughter= 78-72=6 years
From II
Age of daughter can be easily found
Either statement I or statement II by itself is sufficient to answer the question.

71. (c); From (i)
Let investment of Bhavya be Rs x
Then investment of Veer= Rs (9000-x)
From (ii)
Ratio of profit shares
Veer : Bhavya
(9000-x)× 12 x× 12+(x+2000) × 12
(9000-x) : (2x+2000)
ATQ
$\frac{9000-x}{2x+2000} = \frac{2550}{3400}$
Here we can find value of x
So, both the statements taken together are necessary to answer the questions, but neither of the statements alone is sufficient to answer the question.

72. (b); From (i)
Let time taken by person from A to B is x hr
Then from B to A is $(x+\frac{1}{2})$ hr
From (ii)
Let speed while coming from B to A be y km/hr
And while going from A to B = $(y+\frac{20}{3})$ km/hr
ATQ
$\frac{\frac{100}{(y+\frac{20}{3})}}{\frac{100}{y}} = \frac{5}{6}$
Here $y=33\frac{1}{3}$ km
We can find the required average speed of that person by statement II alone.

73. (d); P = Principal, Rate % = X%, T = time
From I →
$\frac{PX^2}{100^2} = 250$
$\Rightarrow X^2 = \frac{250\times100\times100}{25000} = 100 \Rightarrow X = 10\%$
From II →
$\frac{P\times X\times T}{100} = P \Rightarrow X = 10\%$
Either statement I or statement II by itself is sufficient to answer the question.

74. (c); Let speed of A and B be 'x' and 'y' respectively. As A crosses B so, x > y
From I →
$y = 2(x-y) \Rightarrow x = 1.5y$
From II →
In 2 seconds, B will travel 2y more
Hence $16 = \frac{30+2y}{x-y} \Rightarrow 16x - 30 = 18y$
From I and II together →
$\Rightarrow 16x - 30 = 18y$
Becomes
$24y - 30 = 18y$
$y = 5$ m/sec and $x = 7.5$ m/sec
Time in which A cross B = $\frac{30}{2.5} = 12$ seconds
Both the statements taken together are necessary to answer the questions, but neither of the statements alone is sufficient to answer the question.

75. (d); Required ratio = $\frac{96+72+108}{(72-24)+(80-32)} = \frac{276}{48+48} = \frac{276}{96}$
$= \frac{23}{8}$

76. (a); Total number of boys who play Cricket and Football = 44 + 32 = 76
Total students who play Football and Tennis
= 80 + 108 = 188
Required difference = 188 − 76 = 112

77. (c); Total number of boys who play Volleyball and Tennis = 24 + 48 = 72
Total number of girls who play Volleyball and Tennis = 72 − 24 + 108 − 48 = 48 + 60 = 108
Required % = $\frac{72}{108} \times 100 = 66\frac{2}{3}\%$

78. (b); Total number of boys who play Football = 32
Total number of boys who qualified for nationals
= $32 \times \frac{50}{100} = 16$
Total number of girls who play Football = 80 − 32 = 48
Total number of girls who play qualified for nationals = $48 \times \frac{100}{300} = 16$
Total students who were disqualified for nationals = 32 − 16 + 48 − 16 = 16 + 32 = 48
Required % = $\frac{48}{80} \times 100 = 60\%$

79. (b); Total number of girls who play Volleyball
= 72 − 24 = 48
Total number of girls who play Football
= 80 − 32 = 48
Total number of girls who play Tennis
= 108 − 48 = 60
Required average = $\frac{1}{3}(48 + 48 + 60) = \frac{156}{3} = 52$

80. (b); ATQ
$\frac{(120-X)}{Y} = \frac{20}{1}$
$120 - X = 20Y$ ... (i)
And
$\frac{(120-2X)}{Y} = \frac{16}{1}$
$120 - 2X = 16Y$ ... (ii)
From (i) and (ii)
X= 20 & Y=5
X+Y= 25

ENGLISH LANGUAGE

81. (d); The appropriate answer here is option (d). For the answer, refer to paragraph 1 where it is mentioned Ayushman Bharat is the essential first step on the road to universal health coverage, although it has been launched by the NDA government quite late in its term, possibly with an eye on the 2019 general election. Here with the term 'possibly', we are referring to the author's view.

82. (b); Option (b) is the most suitable answer. Refer to first paragraph where it is given without adequate budgetary commitments, the implications of pooling the financial risk for such a large segment of the population through insurers or state-run trusts or societies make the outcomes uncertain. Here the uncertainty of outcomes is about the implication of Ayushman Bharat Scheme. Hence option (b) is the answer.

83. (c); Option (c) is the law which is the most suitable choice. For the answer refer to second paragraph where it is given that State governments should have been persuaded to regulate the hospital sector under the Clinical Establishments (Registration and Regulation) Act, which dates back to 2010. The law broadly provides for standardization of facilities and reasonable rates for procedures. Rest of all the options are not given in the passage.

84. (d); Option (d) is the only pertinent choice here. The answer can be deduced from the second last paragraph where it is mentioned that as Prime Minister Narendra Modi launched his government's ambitious healthcare scheme Ayushman Bharat on Sunday, five states remained unconvinced. Telangana, Odisha, Delhi, Kerala and Punjab have said they will not implement the programme till their concerns are addressed since they have better health assurance schemes.

85. (d); Option (d) is the only statement which is definitely false among all the given statements. This statement can be corrected as follows:" The main focus of government under Ayushman Bharat Scheme is not only on affordable healthcare but also on preventive healthcare."

86. (d); Censured means express severe disapproval of (someone or something), especially in a formal statement.
Condemned means expressed complete disapproval of; censured
Approved-officially agree to or accept as satisfactory.
Acclaimed-publicly praised; celebrated.
Endorsed- declared one's public approval or support of.
Sanctioned- authorized.

87. (c); Avail means use or take advantage of (an opportunity or available resource).
Utilize means the same.
Bruise- injury
Afflict-Trouble , bother
Grieve-Lament, Mourn
Mutilate-Disfigure

88. (a); Apprehension means anxiety or fear that something bad or unpleasant will happen.
Anxiety means a feeling of worry, nervousness, or unease about something with an uncertain outcome. Axiom means a statement or proposition which is regarded as being established, accepted, or self-evidently true.
Conviction means a firmly held belief or opinion.
Certitude means absolute certainty or conviction that something is the case.
Verity means a true principle or belief, especially one of fundamental importance.

89. (a); Envisaged means contemplate or conceive of as a possibility or a desirable future event.
Factual is related to facts. Hence it is the opposite of the given word.
Anticipate-regard as probable; expect or predict.
Envision-imagine as a future possibility; visualize.
Foresee-be aware of beforehand; predict.
Contemplate- look thoughtfully for a long time at.

90. (e); Empanelled means enlisted or enrolled.
Ousted means expelled from a position or place.
Hence it is the only opposite of the given word.
Enlisted means engaged.
Enrolled means recruit to perform a service.
Allocated means distributed for a particular purpose.

91. (b); The word "broad" in the given sentence should be replaced by "board" to form a contextually meaningful sentence. "Board" means a group of people constituted as the decision-making body of an organization; while "broad" means having a distance larger than usual from side to side; wide. All the other highlighted words are

grammatically correct and contextually meaningful. Hence, the option (b) is the most suitable answer choice.
Supersede means take the place of (a person or thing previously in authority or use); supplant.
Exposure means the state of having no protection from something harmful.

92. (d); The word "broke" should be replaced by "brake" as the phrase "acting as…" indicates that the next word should be a noun. However "broke" is a verb which should be replaced by the noun "brake" which means an interruption of continuity or uniformity. All the other highlighted words are grammatically correct and contextually meaningful. Hence, the option (d) is the most suitable answer choice.
Derailed means obstruct (a process) by diverting it from its intended course.
Assault means make a physical attack on.

93. (a); The verb "miring" should be replaced as it is in its present participle form while the sentence is in the past tense. Therefore the correct form of "miring" required here is "mired". All the other highlighted words are grammatically correct and contextually meaningful. Hence, the option (a) is the most suitable answer choice.
Mired means involve someone or something in (a difficult situation).
Hampered means hinder or impede the movement or progress of. Lackadaisical means lacking enthusiasm and determination; and carelessly lazy.
Enforcement means the act of compelling observance of or compliance with a law, rule, or obligation.

94. (d); The word "accommodation" is misspelt in the given sentence as "accommodation". All the other words have been spelt correctly and are in appropriate grammatical and contextual syntax. Hence, the option (d) is the most viable answer choice.
Anticipate means regard as probable; expect or predict.
Accompanied means be present or occur at the same time as (something else).
Neutral means having no strongly marked or positive characteristics or features.
Accommodation means the process of adapting or adjusting to someone or something.

95. (e); All the highlighted words of the given sentence are grammatically correct, contextually meaningful and correctly spelt. Since all the words are correct, the option (e) becomes the most feasible answer choice.
Inclusion means the action or state of including or of being included within a group or structure.
Robust means strong and healthy; vigorous.
Propel means drive or push something forwards.

96. (c); Equivocate [verb] means 'to lie, attempt to conceal the truth';
Deviate [verb] means 'turn away from (a principle, norm); depart; diverge;
Chortle [verb] means 'chuckle with delight';
Water cannon and tear-gas shells are something that are fired or shot to scatter a violent mob.
Among the given options, the option (c) 'fired' is the most appropriate choice and is the correct answer.
'Police fired water cannon and…'

97. (b); Flay [verb] means 'strip the skin off (a corpse or carcass);
Zap [verb] and gallop [verb] mean 'to get rid of or kill something or someone especially intentionally;
Amble [verb] means 'walk or move at a slow pace, relaxed pace'.
Water cannon and tear-gas shells are something that are fired or shot to scatter a violent mob.
The congregation of the farmers was violent, and this is reflected from the sentence 'who tried to break through barricades to enter…' So, it can be safely assumed that the objective of the Police to use the water cannon and tear-gas shells was to scatter or disperse the violent congregation of the farmers.
Among the given options, the option (b) is the most appropriate choice and is the correct answer.
'…and tear-gas shells to disperse thousands of farmers…'

98. (c); Belated [adj.] means 'delayed';
Erudite [adj.] means 'learned; scholarly;
The blank will be filled by an adjective which would qualify the noun 'negotiations' which were failed and were held between BKU leaders and Central Ministers. What sort of adjective should qualify 'negotiations' under the given circumstances.
Among the given options, 'restless', a synonym of hectic, is the most appropriate word to fill the blank and is the correct answer.
Hence, the option (c) is the correct answer.
', even as hectic/restless negotiations between BKU leaders and Central Ministers failed'

99. (b); Clamber [verb] means 'climb by crawling';
Bungle [verb] means 'mismanage; blunder';
Clench [verb] means 'close tightly; grasp';
Belabor [verb] means 'explain or go over excessively or to a ridiculous degree; attack verbally.
The blank seems to be filled by a verb. The preceding clause, which is in passive voice, tells us that Prohibitory orders were issued… The preceding clause relates to given clause, where the blank appears, through a conjunction 'and', meaning that the clause where the blank appears will also be in passive-voice. What verb can be filled in the blank and can follow the noun 'Police personnel'? Under the given circumstances, police personnel can be deployed to ensure that the violent congregation of farmers didn't enter Delhi.
Among the given options, the option (b) is the most appropriate answer.
'3,000 police personnel deployed to ensure…'

100. (a); Dupe [verb] means 'to fool someone or someone easily fooled';
Douse [verb] means 'plunge into water; drench; extinguish';
Collate [verb] means 'examine in order to verify authenticity; arrange in order';
Cogitate [verb] means 'think over';
Arrested [verb] means 'keep (something) from happening'.
The tone of the clause 'Prohibitory orders under Section 144 were issued…' suggests that the motive behind deploying the police was to prevent the Kisan Kranti Yatra from entering Delhi.
Among the given options, the option (a) is the most relevant and appropriate answer choice.
'which began from Tikait Ghat in Haridwar on September 23, was prevented/arrested from entering Delhi…'

101. (e); Castigate [verb] means 'criticize severely; punish';
Debase [verb] means 'reduce in quality or value; lower in esteem; degrade';
Decoy [verb] means 'lure or bait';
Dwindle [verb] means 'shrink; reduce';
What could be the reason for the eruption of violence under the given circumstances which would relate to the phrase 'through the barricades…'?
It seems that a section of the farmers would have tried to break through the barricades. Moreover, break through is a phrasal verb which means make or force a way through (a barrier).
Among the given options, the option (e) 'break' is the most relevant and appropriate answer choice.
'Violence erupted as a section of the farmers tried to break through the barricades…'

102. (d); Admonish means reprimand firmly.
Abolish [verb] means 'cancel; put an end to';
Sway (verb) means 'to persuade/convince';
Berate [verb] means 'scold strongly';
Camouflage [verb] means 'disguise; conceal;'
The blank seems to be a part of the 'to+infinitive' and would be filled by a first-form of verb. The government was seeking something in relation to the farmers and in that respect, announced that a Committee of the Chief Ministers would investigate their demand. Under the given circumstances, what was the Government seeking? The government would like to convince the farmers.
Among the given options, 'sway' is the most relevant word.
Hence, the option (d) is the correct answer.
'Seeking to convince the farmers to return, …'

103. (b); Replace 'at which' by 'where'. Preposition 'to' or 'at' is not used after verb 'reach' but 'adverb of Place' is used.
Example. I reached Delhi around 9.
She has reached where she wanted.

104. (c); The use of 'rather' is superfluous as only 'than' is used after comparative degree (more).
Example. He speaks more clearly than you.

105. (c); 'Has fallen' will be used in place of 'has been fallen' as there is no passive form of intransitive verb (fall).
(Note: Verbs are of two types namely transitive verbs and intransitive verbs. Transitive verbs need an object while Intransitive verbs cannot have an object. Ex. "I bought a car" in which 'bought' is transitive. "The Baby smiled", 'smiled' is an intransitive verb)

106. (a); Replace 'When he used to walk' with 'while he was walking'. For the two incidents of past, if one continues and the other one has happened, then past continuous tense is used for the former and simple past for latter.
Example. While I was walking along the road, a mad dog attacked me.

107. (e); There is no error in the given statement.

108. (d); Here 'work' is used as an uncountable noun. The use of 'an' before 'urgent' is incorrect. Use 'some' in place of 'an' or we can use it like this "a piece of urgent work"

109. (d); The error is in part (d) of the sentence. Use 'is' in place of 'are' as the subject of the sentence is 'the idea' which is singular.

110. (b); 'Enough' will be used after 'kind' as when enough is used as adverb of quantity then enough is always used after the adjective or adverb.

111. (b); The option 'constructively, better' fits the sentence most appropriately where 'constructively' means promoting further development or advancement.
Pro-actively means by taking action to control a situation rather than just responding to it after it has happened.
Objectively means in a way that is not influenced by personal feelings or opinions.

112. (a); Implacable [adj.] means 'unable to be appeased or placated';
Incessant [adj.] means '(of something regarded as unpleasant) continuing without pause or interruption';
Capsized [adj.] means '(of a boat) overturned in the water';
Soliciting [participle] (solicit, verb) means 'ask for or try to obtain (something) from someone';
Words like 'soliciting' and 'approaching' cannot fill the second blank because the preposition phrase 'in military alliances' which follow the blank doesn't gel up well with these words.
So, the options (c) and (d) are ruled-out.
The options (b) and (e) are completely irrelevant and out-of-context. So, these options are also ruled-out.
Hence, the correct answer is the option (a).

113. (a); The option 'limitations, conceal' fits the sentence appropriately where 'conceal' means prevent (something) from being known.
Conceal means not allow to be seen; hide.
Drawbacks means a feature that renders something less acceptable; a disadvantage or problem.
Acknowledge means accept or admit the existence or truth of.

114. (c); 'raise, adequate' fits the sentence appropriately where adequate means satisfactory or acceptable in quality or quantity.
Durable means able to withstand wear, pressure, or damage; hard-wearing.
Stimulate means raise levels of physiological or nervous activity in (the body or any biological system).
Adequate means satisfactory or acceptable in quality or quantity.

115. (b); 'pretext, protecting' fits the sentence appropriately as 'pretext' means a reason given in justification of a course of action that is not the real reason.
Garb means clothing, especially of a distinctive or special kind.
Guise means an external form, appearance, or manner of presentation, typically concealing the true nature of something.
Pretext means a reason given in justification of a course of action that is not the real reason.

116. (e); The logical sequence of the sentences to form a coherent paragraph is DECBA. Hence, the option (e) is the most suitable answer choice.

117. (c); The logical sequence of the sentences to form a coherent paragraph is CABED. Hence, the option (c) is the most suitable answer choice.

118. (b); The logical sequence of the sentences to form a coherent paragraph is FDACBE. Hence, the option (b) is the most suitable answer choice.

119. (d); The correct sequence of the paragraph after the rearrangement of sentences is **DAEBC**.

120. (b); The correct sequence of the sentence after the rearranging them to form a coherent paragraph is EACDB.

REASONING ABILITY

Directions (1-5): Read the following information carefully to find given questions.
8 persons namely P, Q, R, S, W, X, Y and Z are sitting around a square table facing towards center. 4 of the persons are sitting in 4 corners while 4 of the persons are sitting in the middle of the sides. They have different ages. Those who sit in the corners having the ages multiple of 3.Those who sit at the middle of the sides having the ages multiple of 2.
P sits 2nd to the right of the one who has the age of 44. P is an immediate neighbour of the one who is 39 years old. Two persons sit between Q and having the age of 39. Q has not the age of 44. W sits 2nd to the left of Q. S is immediate right of the person having age of 15. Three persons sit between Z and the one having age of 15. The difference between the ages of Z and the one who is 2nd to the left of Z is 6. S is older than Z. Immediate neighbours of S are younger than S. Person having age 22 sits 2nd to the right of the person having age 10. Age of P is not 10. Y sits immediate left of the person having age of 22. Age of Y is 51. Age of R is greater than 20. Age of R is 24 years more than X. Age of X is 3 years more than age of P.

1. Who among the following is of 9 years old?
(a) P (b) S (c) W
(d) X (e) No one

2. Who sits 2nd right of the one who sits immediate left of the one whose age is 51 years old?
(a) R (b) S (c) Y
(d) Q (e) W

3. How many persons sit between the one who is of 15 years old and the one who is of 12 years old, when counted anticlockwise from the one who is of 15 years old?
(a) One (b) Two
(c) Three (d) More than three
(e) None of these

4. ho among the following sits diagonally opposite to Z?
(a) X (b) T (c) S
(d) P (e) W

5. Who among the following sits immediate right of S?
(a) P (b) W (c) Y
(d) R (e) Z

6. Television is no longer the medium of entertainment at present. Mobile has taken the place of it among the youngsters as they used to spend most of their time on it.
Which of the following can be hypothesized from the given statement?
(a) Television is still most popular among kids.
(b) People love to play games at mobile phone instead of involving in outdoor activities.
(c) Mobile has become the addiction for the younger generation.
(d) The older generation is not comfortable in using mobile phone for their entertainment.
(e) A proper treatment is required by a doctor to get rid of the addiction of the mobile phone.

7. Mosquito bites can be more than just annoying and itchy. They can make you really sick. Protect yourself and your family from mosquitoes during travelling. Because dangerous diseases like Zika, dengue, and chikungunya are spread by mosquitoes.
Which of the following can be assumed from the given statement?
(a) Mosquitoes are more dangerous than any other animals in the world.
(b) There is no treatment of diseases like Zika, dengue, and chikungunya that are spread by mosquitoes.
(c) Forty percent of the world's population lives in an area at risk for dengue spread by mosquito and an estimated 390 million people per year are infected with the viruses.
(d) There are more chances to get infected from mosquitoes while travelling rather than staying at home.
(e) All travelers are suffering from diseases like Zika, dengue, and chikungunya spread by mosquitoes.

Directions (8-11): Read the following information and answer the questions that follow:
'A' walks 10 km north from point Q to reach point H. He takes a left turn and walks 9 km to reach point S. On the other side, 'B' walks 5 km north from point Y to reach point J. Point Y is 9 km either east or west from point Q. Next 'B' turns to his right and walks 4km to reach point D. Also 'A' turned left from point S and reached point M after walking 5 km. M is in west direction from J.

8. What is the shortest distance between points M and J?
(a) 10 km (b) 26 km (c) 18 km
(d) 12 km (e) Cannot be Determined

9. If 'B' walks 4 km east from point Y, then he is in which direction with respect to point D?
(a) South (b) North-west (c) North-east
(d) North (e) South-west

10. What is the shortest distance between points Q and D?
(a) √194 km (b) √198 km (c) √197 km
(d) √196 km (e) √195 km

11. What is the direction of J with respect to Q?
(a) South (b) North-west (c) North-east
(d) North (e) South-west

Directions (12-16): Read the following information carefully and answer the questions that follow:
Eight friends A, B, C, D, E, F, G and H born on 7th, 9th, 16th and 19th in March and July. Each one of them likes either a colour or a fruit. The persons who likes colours were born on that day which is a perfect square and the colour they likes are:- Yellow, Green, Red and Blue. The persons who were born on the day which denotes a prime number like fruits – Apple, Cherry, Mango and Banana.
The one who likes yellow colour was born on a day which is a perfect square in the month of march. No person was born between D and the one who likes yellow. D doesn't like colours. Three persons were born between D and the one who likes Mango. There is no person born between the one who likes Mango and Blue colour. The number of people born after the one who likes blue colour is one less than the number of persons born before A. The one who likes Apple was born immediately before B. B do not like Mango. The number of people born before B is same as the number of persons born after G. Three persons were born between the one who likes Green and H. H and the one who likes Cherry was born in the same month but not in March. C was born after the one who likes Blue colour. E doesn't like any colour. F doesn't like Apple.

12. Who among the following likes green colour?
(a) B (b) A (c) G
(d) H (e) C

13. Who was born on 16th March?
(a) D (b) A (c) G
(d) F (e) E

14. Who among the following likes cherry?
(a) F (b) G (c) H
(d) A (e) B

15. Who was born on 19th July?
(a) C (b) A (c) D
(d) B (e) E

16. Who among the following likes red colour?
(a) A (b) B (c) H
(d) C (e) D

Directions (17-21): Each of the questions given below consists of a question and two statements numbered I and II. You have to decide whether the data provided in the statements are sufficient to answer the question.
(a) If statement I alone is sufficient to answer the question, but statement II alone is not sufficient to answer the question.
(b) If statement II alone is sufficient to answer the question, but statement I alone is not sufficient to answer the question.
(c) If statement either I or II is sufficient to answer the question.
(d) If both the statements I and II taken together are not sufficient to answer the question.
(e) If both the statements I and II taken together are sufficient to answer the question.

17. What is the code for 'festival' in a code language?
I. In that language `lo ko ni sa' means 'Celebrate festival light bright' and 'jo to ni fa' means 'festival surprise candle shine '.
II. In the same language 'bi ya la fa' means 'surprise high celebration delight' and 'ya la fa ni' means 'Surprise festival high delight'.

18. Six persons A, B, C, D, E and F are sitting around a circular table? Are they all facing the center?
I. A sits second to the left of F. D sits second to the right of F. Both E and C are immediate neighbour of A. F is facing inside.
II. B is second to the left of E. Only D is between B and E. C is to immediate left of F. B sits opposite to A. C is third to the left of D. E is second to the right of B and second to the left of C.

19. Six persons A, B, C, D, E, F have different heights. Who among the following is second tallest?
(I) F is taller than only one person. C is taller than A but shorter than E.
(II) A is taller than both F and B. E is not the tallest.

20. Who sits second to the left of Sparrow?
(I) Five birds i.e. myna, parrot, bulbul, crow and sparrow are sitting in a row in north direction. Myna sits at one of the extreme end. Parrot sits in between Myna and Bulbul.
(II) Only one person sits in between Bulbul and Sparrow. Sparrow does not sit to the left of Parrot.

21. Five persons P, Q, R, S, T live on five different floors such as bottom floor is numbered as 1 and top floor is numbered as 5. Who among the following lives on fourth floor?
(I) Three person lives between Q and T. R lives on third floor.
(II) Only one person lives between P and S. T does not live above R.

Directions (22-26): Study the following information carefully and answer the given questions.
Ten persons Q, R, S, T, U, V, W, X, Y and Z are going to four cities on four different dates i.e. 2nd, 4th, 7th and 9th of the month. Each person goes on different cities on different dates. Four cities are namely Pune, Chandigarh, Kochi and Patna, but not necessarily in the same order. At least one person goes on each date.

No person goes to Pune on 4th of the month. R does not go to any city on 2nd and 7th of the month. The persons, who go on 7th, go to every city. Y goes to Kochi only with that person who goes on 7th of the month. Maximum four persons can go on the same date. Only one person goes to Chandigarh. Z does not go on 7th of the month. S does not go to Pune but go with U, who goes on 9th of the month. One of the person, who goes to Kochi, goes on even number date of the month, which is more than 3. R goes to Pune with Q, but does not go with X. X goes on that city in which most of the person are going. V does not go with S and Z but go with another person. Z goes to Pune. T does not go with U. W does not go on 9th and 2nd of the month. X goes on an odd number date of the month and no any person go on that date on which X goes in that city. One of the person, who goes to Pune go on even number date of the month. S goes on an odd number date of the month.

22. Who among the following person goes to Chandigarh?
(a) R (b) V (c) X
(d) T (e) Q

23. In which of the following city most of the persons are going?
(a) Chandigarh (b) Pune (c) Kochi
(d) Both Kochi and Pune (e) Patna

24 Four of the following five are alike in a certain way based on their positions in the above arrangement and so form a group. Who among the one that does not belong to that group?
(a) S (b) R (c) Y
(d) X (e) T

25. Which of the following statement is true regarding U?
(a) Only U goes to Chandigarh.
(b) U goes on 7th of the month
(c) None of the option is true
(d) U goes to that city in which most of the person is going.
(e) U goes with Z

26. Who among the following person goes on 2nd of the month?
(a) Z (b) Q (c) W
(d) Y (e) S

27. Releasing the 'Road Accidents in India - 2016' report, the Road Transport and Highways Minister said more than 400 people lost their lives daily on roads in road accidents at night.
Which of the following could be the appropriate cause of the death in road accidents at night?
(a) Increase in population lead to more number of accidents.
(b) Many people prefer to travel in night rather than in day.
(c) Lack of proper lightning arrangement and undignified installation of traffic signals at many places.
(d) Traffic rules are stricter in day-time to avoid traffic congestion problem.
(e) Traffic violation is not a punishable offence in India.

Directions (28-32): Study the following information carefully to answer the given questions:
A word and number arrangement machine when given an input line of words and numbers rearranges them following a particular rule. The following is an illustration of input and rearrangement.
Input: 97 nosy 21 snow cold 32 asian 46 65 viral 83 high
Step I: 211 97 nosy snow cold asian 46 65 viral 83 high 322
Step II: asian 211 97 nosy snow 46 65 viral 83 high 322 cold
Step III: 463 asian 211 97 nosy snow viral 83 high 322 cold 654
Step IV: high 463 asian 211 97 snow viral 83 322 cold 654 nosy
Step V: 835 high 463 asian 211 snow viral 322 cold 654 nosy 976
Step VI: snow 835 high 463 asian 211 322 cold 654 nosy 976 viral
Step VI is the last step of the rearrangement. As per the rules followed in the above steps, find out in each of the following questions the appropriate steps for the given input.
Input: peak 18 utility 76 emerge 27 beautiful 37 51 visible 86 know

28. How many steps would be needed to complete the arrangement?
(a) X (b) VIII (c) V
(d) VI (e) None of these

29. What will the addition of the numbers which is fifth from the left end in step II and 5th from the right end in step IV?
(a) 312 (b) 210 (c) 162
(d) 165 (e) None of these

30. Which of the following would be the difference of the numbers which is 2nd from left end in step IV and 2nd from right end in Step II?
(a) 290 (b) 83 (c) 193
(d) 101 (e) None of these

31. Which of the following element will be 6th from the left of 3rd from the right end in step V?
(a) 181 (b) beautiful (c) 373
(d) know (e) None of these

32. In Step IV, which of the following word/number would be on 4th position (from the left end)?
(a) visible (b) 181 (c) 97
(d) utility (e) None of these

33. Education has been a problem in our country and lack of it has been blamed for all sorts of evil for hundreds of years. Half the country does not even today have access to proper education, and only a small fraction can go to university.
Which of the following substantiates the given statement?
(a) Our education system today encourages excellence – in students, in teachers, throughout the system.
(b) Our new education system creates entrepreneurs, innovators, artists, scientists, thinkers and writers who can establish the foundation of a knowledge based economy.
(c) India needs to embrace internet and technology if it has to teach all of its huge population, the majority of which is located in remote villages.
(d) Our education system is geared towards teaching and testing knowledge at every level as opposed to teaching skills.
(e) We may have the most number of engineering graduates in the world that has been translated into much technological innovation here.

Directions (34-38): Study the following information carefully and answer the given questions:
Seven cars A, B, C, D, E, I, H are parked in a linear row facing north in such a way that no two cars parked with each other of according to alphabetical order (for ex- A is not parked with B, B is not parked with A and C and so on).
Some cars either of Petrol or some are Diesel variant. I is third to the left of A. More than three cars are parked between the petrol cars. E is second to the right of B. H is a diesel car and parked at one of the extreme end. C is a diesel car and parked fourth to the right of D. All the cars are arranged in ascending order according to the distance covered by them from left to right. Car B covers 27km and Car C cover 40km. H is to the right of E. I is of Diesel variant car and no petrol variant car parked next to it.

34. Which among the following are petrol cars?
(a) D and E (b) A, I, B (c) A and D
(d) A, I, D, B (e) None of these

35. What can be the distance covered by car I?
(a) 45km (b) 63km (c) 17km
(d) 31km (e) 25km

36. Which among the following cars are parked at extreme ends?
(a) D, E (b) H, B (c) H, D
(d) D, B (e) None of these

37. Which among the following car is parked immediate left of car C?
(a) E (b) H (c) D
(d) A (e) None of these

38. How many cars are parked in between car B and car H?
(a) Four (b) Three (c) Five
(d) Two (e) None of these

39. Bihar Chief Minister Nitish Kumar on Monday launched a State-wide campaign as one of the major step for women empowerment to abolish **dowry**, stated it as major drawback of our society.
Is this decision sufficient to get rid from this custom, which is running from long time in Bihar?
Which of the following will be best suited option to get rid from dowry with their explanation?
(a) Yes, as State govt. Is launching state wide campaign, it will impact the whole society of Bihar.
(b) No, It will not impact too much untill thinking of people will changed and dowry will be declared as illegal and punishable offence in Bihar.
(c) Yes, as many NGO run by women will also come against dowry.
(d) No, It has been set in nerves of Bihar's society as one of the necessities of the marriage.
(e) Yes, As other states will also follow Mr. Kumar step to abolish dowry from society.

40. Statement-Whole world looking at India, says Modi. India's growth presents a win-win partnership for both India and the U.S., Prime Minister Narendra Modi told while adressing the media gathering ahead of his first meeting with President Donald Trump.
(I) The talks between the Trump and Modi would be broad-ranging and seek to advance common priorities.
(II) Prime Minister Narendra Modi would only attend the UN 'Vesak Day' celebrations and no bilateral agreements will be signed during his visit to Sri Lanka.
(III) US President *Donald Trump* and Prime Minister *Narendra Modi* forging a strong personal bond, and advancing a solid bilateral relationship.
(IV) The visit provides an opportunity to strengthen the US-India strategic partnership, which the President views as being critical in Asia-Pacific and globally.
Which of the following is not in line with the given statement?
(a) Only II (b) Only III and IV
(c) Only II and III (d) Only IV
(e) Only I and III

QUANTITATIVE APTITUDE

Directions (41-46): Study the following table carefully to answer the questions that follow.
The table shows the online and offline contestants taking part in a survey from four villages and total contestant who have not completed the survey (online and offline)

Note-

1. Total contestants in a village= Online contestants + Offline contestants
2. Total contestants in a village=Contestants who complete the survey + contestants who do not complete survey

Village	Online contestants	Offline contestants	Contestants who do not complete the survey (online + offline)
A	350	44%	122
B	560	65%	92
C	465	40%	108
D	480	60%	190

41. In the village A, the number of online and offline contestants who didn't complete the survey are equal, then online contestants from village A who completed the survey are what percent (approximate) more than offline contestants who completed the survey from the same village?
(a) 27% (b) 22% (c) 35%
(d) 31% (e) 37%

42. Total number of contestants from village C who completed the survey are how much more or less than total number of contestants who completed the survey from village B?
(a) 841 (b) 857 (c) 837
(d) 851 (e) 860

43. If the ratio between online to offline contestants who didn't completed the survey from village 'D' is 8 : 11 and 65% of contestants who completed the survey online are male and 60% of contestants who complete the survey offline are female, then find the difference between females of contestants who completed the survey online and male contestants who completed the survey offline from village D ?
(a) 102 (b) 88 (c) 104
(d) 108 (e) 106

44. Find the difference between the number of offline contestants of village C and that of village A.
(a) 45 (b) 40 (c) 38
(d) 35 (e) 30

45. Find sum the of difference between total number of online and offline contestants who participated in the survey from all four village.
(a) 950 (b) 980 (c) 960
(d) 735 (e) 840

46. The number of offline and online contestant together who completed the survey from village C are approximately what percent of total participants on survey from village D?
(a) 52% (b) 62% (c) 48%
(d) 56% (e) 59%

47. A and B started business with Rs 600 and Rs 500 respectively. After 4 months, C replaces B with X% of B's capital. After 1 year C's share of profit out of the total profit 24000 is 5600. Find the value of X.
(a) 60 (b) 70 (c) 75
(d) 66 (e) 65

48. A train is 216 m long and it crosses a platform in 19 seconds with speed 21 m/s. If some 21 m long boxes are added in train and it crosses same platform, then it takes 26 seconds to cross the platform with same speed. How many boxes were added to the train?
(a) 7 (b) 10 (c) 12
(d) 5 (e) 8

49. A can complete a work in 36 days. B is 33.33% more efficient than A. In how many days both complete the work if they work on alternate days starting with A?
(a) 26 days (b) 30 days (c) 28 days
(d) 31 days (e) 36 days

50. Rakesh added 12% of his salary in PPF,$3/8^{th}$ of the remaining amount is spent on clothes and the difference between PPF and clothes expenses is Rs 10500. Remaining amount is spent on house rent and other expenses. If house rent expenses is Rs 1500 less than other expenses, then what is the house rent expenses?
(a) Rs. 12000 (b) Rs. 10000 (c) Rs. 13000
(d) Rs. 11000 (e) Rs. 15000

Directions (51-55): In each of the following series, one number does not follow a specific pattern. Find that number.

51. 200, 196, 192, 180, 160, 130, 88
(a) 180 (b) 196 (c) 200
(d) 88 (e) 160

52. 9.2, 10.6, 7.6, 12.4, 6, 14, 4.4
(a) 10.6 (b) 14 (c) 4.4
(d) 7.6 (e) 12.4

53. 1, 730, 975, 1054, 1081, 1090, 1093
(a) 730 (b) 975 (c) 1090
(d) 1093 (e) 1054

54. 3, 4, 9, 28, 113, 565, 3397
(a) 9 (b) 3397 (c) 565
(d) 4 (e) 28

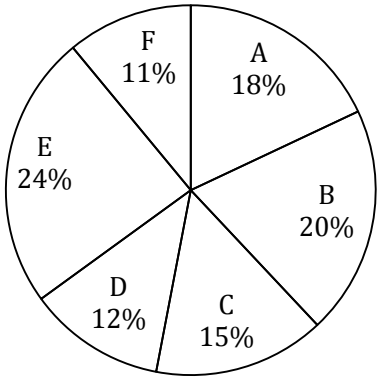
55. 4, 6, 12, 30, 60, 315, 1260
(a) 12 (b) 1260 (c) 60
(d) 30 (e) 315

Directions (56-60): Study the following pie charts and answer the questions that follow:
Given below are two pie charts which shows the percentage distribution of cricket players and football players in 6 sports club out of the total cricket and football players respectively in these six sports club.

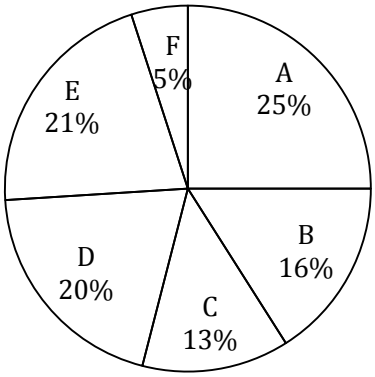
Note:

1. If it is said that number of players playing "either" football or cricket then it means sum of players playing football and cricket.
2. no players plays both games

Cricket = 2400



Football = 3200



56. What is the difference between the total number of players playing either Football or Cricket from club D and those playing Football from club C and E together?
(a) 152 (b) 160 (c) 165
(d) 172 (e) 150

57. The ratio between male to female players who play either Cricket or Football from club E is 9 : 7, then Male players from club E playing either Cricket or Football are what percent of players playing Football from club F?
(a) 408.75% (b) 437.75% (c) 438.75%
(d) 416.75% (e) 428.75%

58. $\frac{5}{12}$th of players playing Cricket from club E are male and $\frac{7}{13}$th of players playing football from club C are male. Find the sum of total number of female players from club E playing Cricket and total females from club C playing Football .
(a) 528 (b) 532 (c) 548
(d) 520 (e) 522

59. Players who playing Football from club D and B together are what percent (approximate) more or less than players playing Cricket from club D and F together?
(a) 112% (b) 115% (c) 105%
(d) 109% (e) 95%

60. Find the difference between the number of players playing Cricket from club A and C together and the number of players playing Football from club B, D and F together.
(a) 615 (b) 520 (c) 525
(d) 620 (e) 515

61. In bag A there are 5 red balls, X green balls and 7 yellow balls. Probability of drawing one green ball from bag A is 2/5. In bag B there are (X-3) red balls, (X-4) green balls and 6 yellow balls. 2 balls are drawn from bag B. Find the probability that both the balls are red colour?
(a) 2/23 (b) 1/21 (c) 4/21
(d) 2/21 (e) $\frac{5}{21}$

62. Sum ofresent ages of A and B is 41, Age of A two year hence is equal to age of C one year ago and Age of A four year hence is equal to age of B one year ago. If ratio of present age of A and D is 3 : 4. Find the difference between age of C and D.
(a) 3 years (b) 5 years (c) 6 years
(d) 4 years (e) 8 years

63. Radius of a cylinder is equal to the side of an equilateral triangle having area $16\sqrt{3}\ cm^2$ and height of the cylinder is equal to the perimeter of the triangle. Then find the volume of cylinder.
(a) 1536 π sq. cm (b) 1518 π sq. cm
(c) 1620 π sq. cm (d) 1460 π sq. cm
(e) 1548 π sq. cm

64. A man invested Rs. 8000 in a scheme giving 20% p.a. compound interest for two year if the interest received from this scheme is 400% more than the interest on some other amount from another scheme giving 8% S.I. for 4 year. Find the total amount invested in both schemes.
(a) Rs. 11200 (b) Rs. 10200 (c) Rs. 12200
(d) Rs. 10400 (e) Rs. 10600

65. In one litre of mixture of alcohol and water, 30% is water. The amount of alcohol that must be added to the mixture, so that the part of water in the mixture becomes 15%, is:
(a) 1000 ml (b) 700 ml (c) 300 ml
(d) 900 ml (e) 1200ml

66. The surface area of a spherical part of a hemispherical bowl with a flat circular detachable cover, excluding the cover, is 616 sq cm. The area of the cover is 38.5 sq cm. What is the volume of the bowl?
(a) 1339 cm^3 (b) 1430 cm^3
(c) 1570 cm^3 (d) 2096.69 cm^3
(e) 2032. 69 cm^3

Directions (67-70): The following questions are accompanied by three statements (A) or (I), (B) or (II), and (C) or (III). You have to determine which statement(s) is/are sufficient/necessary to answer the questions.

67. The ratio of the ages of Javed and Akhtar is 6 :11. Find out the ratio of their ages 5 years ago.
A. The difference of their ages is 25 years.
B. The difference of their ages after 5 years will be 25 years.
C. The sum of their ages is 85 years.
(a) Only A and C together are sufficient
(b) Anyone of A, B and C is sufficient
(c) Only A and B together are sufficient
(d) Any two of A, B and C are sufficient
(e) All together are necessary

68. What is the cost of painting the two adjacent walls of a rectangular hall which has no windows or doors?
I. The area of the base of hall is 24 square metres.
II. The breadth, length and the height of the hall are in the ratio of 4 : 6 : 5.
III. Area of one wall is 30 square metres.
(a) Only I (b) Only II (c) Only III
(d) Either I or III (e) Data inadequate

69. 8 men and 6 women can complete a piece of work in 21 days. How many days will it take for 12 men and 9 women to complete the same work?
A. 6 men can complete the work in 42 days.
B. 7 women can complete the work in 63 days.
C. The amount of work done by a woman is four-sevenths of the work done by a man in one day.
(a) Any two of them
(b) Any of them
(c) Only C
(d) Either A or B only
(e) No need of any information

70. A train crosses another train in 10 sec. Find out the lengths of the trains.
A. Ratio between the lengths the of second and first train is 4 : 5.
B. Ratio between the speed of first and second trains is 1 : 2.
C. The speed of first train is 36 km/hr.
(a) Only A and B together
(b) Only B and C together
(c) Only A and C together
(d) Questions can't be answered even after using all the information
(e) None of these

Directions (71-75): Given below the bar graph shows the percentage of valid voters in 5 villages in two years 2001 and 2005. Study the bar graph carefully to answer the based questions.
NOTE- Total voters in any year = Valid voters + Invalid voters

71. What is the difference between invalid voter from village C in the both given years, if valid voters in 2005 from village C are 4000 which is $31\frac{11}{19}\%$ more than valid voters of same village in year 2001.
(a) 1190 (b) 1250 (c) 1290
(d) 1350 (e) 1365

72. If in the year 2005 from village A, 2500 voters were declared invalid voters 10% of valid voters opted NOTA and the winner got 200 more votes than loosing candidate, then find the total vote hat loosing candidate got in 2005 from village A.
(a) 4400 (b) 4600 (c) 5400
(d) 5200 (e) 4800

73. In village B, if the total voters in 2001 were $13\frac{1}{23}\%$ more than total voters in 2005, then find the ratio of invalid voters in 2001 to the invalid voters in 2005 in same village.
(a) 131 : 160 (b) 130 : 161 (c) 127 : 141
(d) 18 : 35 (e) 161: 130

74. If there are 1600 males in valid voters from village E in 2001 and the females in valid voters of same village and same year contributed is 36% of total valid voters. Find the percentage of invalid male voters in total voters, if total males voters from village E in 2001 were 2000.
(a) 16.2% (b) 12.4% (c) 14.6%
(d) 12.8% (e) 14.8%

75. If the ratio between valid voters from village B in 2001 and invalid voters from village D in 2005 was 16 : 3, then total voters from village D in 2005 were what percent more or less than total voters from village B in 2001 ?
(a) $45\frac{2}{7}\%$ (b) $53\frac{4}{5}\%$ (c) $53\frac{1}{8}\%$
(d) $52\frac{1}{8}\%$ (e) $50\frac{2}{5}\%$

Directions (76-80): Study the following data to answer the questions that follow.
There are two companies namely A and B, which sell chairs, tables and wardrobes in 3 months August, September and October. The ratio of chair, tables and wardrobes sold by A in August is 42 : 36 : 23 while ratio of chairs sold by A in August, September and October is 14 : 23 : 27. Wardrobes sold by A in August is 230 less than chairs sold in September by A. In September 665 chairs, 400 tables and 210 wardrobes were sold by two companies together. B sold same number of chairs in Aug and September. Number of tables sold by company B in September was equal to number of chairs sold by A in August while number of wardrobes sold by A in August and B in September were equal. Company B sold total 1025 chairs in these three months together which was 480 more than total number of tables sold by A. Ratio of tables sold by A and B in August is 12 : 11 and in October is 35 : 38 respectively. Total number of items sold in August was 1075. Total number of wardrobes sold by A in October was 35 less than wardrobe sold by B in October , while sum of wardrobe sold by A and B in October is 205.

76. Total number of chairs sold by B in September and October is
(a) 750 (b) 725 (c) 705
(d) 715 (e) None of these

77. By what percent tables sold by A in October are more than wardrobes sold by B in October ?
(a) $45\frac{5}{6}\%$ (b) $40\frac{5}{6}\%$ (c) $38\frac{5}{6}\%$
(d) $36\frac{5}{6}\%$ (e) None of these

78. Find the difference in number of chairs sold by A and B in August.
(a) 101 (b) 120 (c) 105
(d) 110 (e) 112

79. What is the ratio of number of tables sold by A in August to that of B in September?
(a) 7 : 6 (b) 6 : 7 (c) 12 : 13
(d) 11 : 12 (e) 6 :11

80. Find the number of wardrobes sold by B in October.
(a) 80 (b) 120 (c) 115
(d) 95 (e) 125

ENGLISH LANGUAGE

Directions (81-85): Read the following passage carefully and answer the questions given below it. Certain words are given in bold to help you locate them while answering some of the questions.
There is a sense of gloom pervading India's $150-billion information technology (IT) industry, which earned India $88 billion in foreign exchange in 2015-16 through the exports of software and IT-enabled services (ITeS). According to data from the Reserve Bank of India (RBI), the rate of growth of the combined exports of software and ITeS fell from 20.8 per cent in 2012-13 to 14.9 per cent in 2014-15 and to a low of 7.3 per cent in 2015-16. Global circumstances combined with the specific nature of India's IT **prowess** seem to be responsible for this fall. India's IT industry recorded remarkable growth over a long period because it exploited an outsourcing opportunity by perfecting a global delivery model for software and ITeS based on cheap skilled labour. That opportunity was offered by the cost-cutting **imperatives** facing the corporate sector in the United States and elsewhere.

As a result, IT industry revenues grew in double digits, with export earnings accounting for a large share of those revenues. Employment grew rapidly, albeit from a low base and at a lower pace than revenues. And a service industry to support the IT sector's growth grew around the principal centres of its activity, suggesting that despite the absence of physical production the sector had backward linkages through which it delivered some economy-wide benefits. This combination of the characteristics of India's IT success not only gave the industry a position of privilege in the economy but made it the symbol of India's **ostensible** post-globalisation success.

However, there were a number of features of that model that made it vulnerable to changes in circumstances. To start with, it had a high degree of dependence on exports for growth, with the U.S. accounting for a very large share of those exports, followed by the European Union (E.U.) at a distant second. At the turn of the century, the U.S. market accounted for close to two-thirds of India's IT exports and the E.U. for about a quarter, and even in 2015-16, the U.S. was first with 62 per cent and Europe second with 24 per cent. Little had changed for the industry.

Secondly, software services (or code writing and customisation of different levels of sophistication) and ITeS, rather than IT products, accounted for an overwhelming share of revenues. To **garner** those revenues, a workforce with essential IT skills and familiarity with English, communication infrastructure, and the requisite organisation were the necessary ingredients. But sustaining those revenues required constant attention to cost competitiveness, which encouraged automation of the routine activities that constitute an important part of the industry's operations.

Thirdly, this output composition required combining offshore delivery with local services provision to understand client requirements and **customize** services and even run operations. So, on-site work remained an important component of the industry's activity. In 2002-03, 48 per cent of India's exports of IT services was through the medium of a commercial presence on foreign soil and another 13.5 per cent through the presence of natural persons. By 2015-16 those figures had come down to 18.9 per cent and 16.1 per cent respectively. But the local presence, which ensured provision of 35 per cent of the value services that had risen in value from Rs.31,100 crore to Rs.5,76,310 crore between 2002-03 and 2015-16, was undoubtedly large and crucial to the industry's performance.

Finally, a few firms (such as Tata Consultancy Services (TCS), Infosys and Wipro) account for a very large share of the industry's revenues, drawing attention to their operations and brand as happened in the U.S. recently.

81. Why according to the passage India's IT industry is facing a sense of despondency?
(I) Because of unavailability of cheap skilled labour force in the country.
(II) There is an abrupt decline in the rate of growth of the combined exports of software and ITs.
(III) Because of over-exploitation of outsourcing opportunities.
(a) Only (I) is correct
(b) Only (II) is correct
(c) Both (I) and (III) are correct
(d) Both (II) and (III) are correct
(e) All are correct

82. How the outsourcing opportunity helped India's IT industry in achieving exceptional growth?
(I) It bettered India's global delivery model for software and ITeS based on cheap skilled labour.
(II) There was a significant growth in generation of revenues of IT industry.
(III) It helped in rapid growth of employment.
(a) Only (I) is correct
(b) Only (III) is correct
(c) Both (I) and (II) are correct
(d) Both (II) and (III) are correct
(e) All are correct

83. What does the author mean by the sentence, "**Little had changed for the industry**" as used in the passage?
(a) Despite the subsequent growth in other sectors, Indian IT industry failed to add value to the economy.
(b) IT Industry still had a high degree of dependence on exports for growth.
(c) Software services and ITeS were responsible for overwhelming share of revenues, rather than IT products.
(d) Both (b) and (c)
(e) All of the above

84. Which of the following statements is/are true in context of the passage?
(I) In 2002-03, 18.9 per cent of India's exports of IT services was through the medium of a commercial presence on foreign soil and another 16.1 per cent through the presence of natural persons.
(II) India's IT success not only gave the industry a position of privilege in the economy but made it the symbol of India's ostensible post-globalisation success.
(III) A workforce with essential IT skills and familiarity with English, communication infrastructure, and the requisite organisation were the necessary ingredients for drawing attention of the outsourcing opportunity.
(a) Only (I) is true
(b) Only (II) is true
(c) Both (I) and (II) are true
(d) Both (II) and (III) are true
(e) All are true

85. Why according to the passage the growth rate of combined exports of software and ITeS slumped to a new low?
(a) Global circumstances combined with the specific nature of India's IT prowess seem to be responsible for this fall.
(b) India's over dependence on the exports of software and ITeS for growth.
(c) Due to absence of physical production.
(d) Lack of workforce with essential IT skills and familiarity with English, and communication infrastructure.
(e) All of the above.

Directions (86-88): Choose the word/group of words which is most similar in meaning to the word/group of words printed in bold as used in passage.

86. Prowess
(a) Dexterity (b) Method (c) Composure
(d) Liberty (e) Serenity

87. Garner
(a)Pick up (b)Setup (c)Preserve
(d)Buy up (e)Amass

88. Imperative
(a)Subtle (b)Piercing (c)Vital
(d)Supple (e)Mercurial

Directions (89-90): Choose the word/group of words which is most opposite in meaning to the word/group of words printed in bold as used in passage.

89. Ostensible
(a)Avowed (b)Genuine (c)Alleged
(d)Illusory (e)Feigned

90. Customize
(a)Sustenance (b)Standard (c)Maintenance
(d)Reshape (e)Comply

Directions (91-95): Read the following passage carefully and answer the questions given below it.

Recent events — the UP government's waiver of farmer loans, dramatic protests by Tamil Nadu farmers in Delhi and a warning from the RBI Governor against loan waivers — have once again brought farm loan write-offs under public glare.

Farm loans may be crop loans or investment loans taken to buy equipment. Both farmers and banks reap a good harvest when all is well. But when there is a poor monsoon or natural calamity, farmers may be unable to repay loans. The rural distress in such situations often prompts States or the Centre to offer relief — reduction or complete waiver of loans. Essentially, the Centre or States take over the liability of farmers and repay the banks. Waivers are usually selective — only certain loan types, categories of farmers or loan sources may qualify.

Agriculture in India has been facing many issues — fragmented land holding, depleting water table levels, deteriorating soil quality, rising input costs, low productivity. Add to this vagaries of the monsoon. Output prices may not be remunerative. Farmers are often forced to borrow to manage expenses. Also, many small farmers not eligible for bank credit borrow at exorbitant interest rates from private sources. When nature rides roughshod over debt-ridden farmers in the form of erratic monsoon and crop failures, they face grim options. Indebtedness is a key reason for the many farmer suicides in the country.

Loan waivers provide some relief to farmers in such situations, but there are debates about the long-term effectiveness of the measure. Critics demand making agriculture sustainable by reducing inefficiencies, increasing income, reducing costs and providing protection through insurance schemes. They point out that farm loan waivers are at best a temporary solution and entail a moral hazard — even those who can afford to pay may not, in the expectation of a waiver. Such measures can erode credit discipline and may make banks wary of lending to farmers in the future. It also makes a sharp dent in the finances of the government that finances the write-off. A blanket waiver scheme is detrimental to the development of credit markets. Repeated debt-waiver programmes distort households' incentive structures, away from productive investments and towards unproductive consumption and wilful defaults. These wilful defaults, in turn, are likely to disrupt the functioning of the entire credit system.

The real crisis for Indian farmer is that he or she is not in control of the produce, unlike other businesses, and is dependent on cartel of traders to fetch a decent price. The cartel makes money in case of good or bad crop season as their margins remain intact. In fact, in case of a crop failure the trader profit margin rises whereas the farmer is in distress without remunerative price. The governments – Centre and states – have repeatedly failed to break the cartelisation and their effort to create farm infrastructure through cold stores has helped the corporate sector more than the farmers. Except some farmers in Maharashtra and Punjab, most of the cold stores built with help of the government subsidy are owned by corporates. So, now these corporates are buying produce in farms at cheap rates, keep them in cold stores, repackage them and sell them in malls in cities at thrice the purchase price. Neither the farmer gains nor the consumer.

To be sure, the agriculture sector needs government support but loan waivers are not the solution. On the contrary, expenditure on loan waivers will eventually leave less fiscal space for public expenditure in agriculture. India needs massive investment in areas such as irrigation, water conservation, better storage facilities, market connectivity and agricultural research. The problems in Indian agriculture are structural. They need long-term

solutions. Loan waivers will only end up complicating the problem. The Indian economy has suffered a lot due to competitive populism in the past. It's time parties and governments address the real issues.

91. According to the passage, why there is a need of waiving the loans of the farmers?
(a) So that agricultural sector and economy do not get affected.
(b) Incapability of farmers to repay the loans due to natural disasters.
(c) As Private firms pressurize to repay the loans.
(d) To meet the long term solutions of farmers.
(e) All of the above.

92. What are the disadvantages related to the loan waiver scheme?
(a) It can abrade credit regulation and may make banks wary of lending to farmers in the future.
(b) It leads to less involvement of farmers for credit benefit from banks in the future.
(c) The loan waiver scheme perverts the households' incentive structure and leads to unproductive consumption.
(d) Both (a) and (c) are correct.
(e) All are true.

93. According to the passage, what needs to be done in order to resolve the issue?
(i) Banks should lend the appropriate amount of credit to farmers.
(ii) There should be Long term solutions of structural problems of agriculture.
(iii) Investment in areas like irrigation, water conservation, better storage facilities, etc.
(a) Only (i) is correct
(b) Only (ii) is correct
(c) Both (i) and (ii) are correct
(d) Both (ii) and (iii) are correct
(e) All are correct

94. Which is the most appropriate title of the passage?
(a) Need for farm loan write-offs.
(b) The hazards of farm loan waivers.
(c) The real crises of Indian farmers.
(d) A Blanket waiver scheme.
(e) A Dramatic protests by Tamil Nadu farmers.

95. Which of the following statements is **false** in context of the passage?
(a) For the rural distress, The Centre or States take over the culpability of farmers and repay the banks.
(b) To regulate the expenses, farmers are forced to borrow.
(c) A blanket waiver scheme is detrimental to the development of credit markets.
(d) Loan Waivers will end up simplifying the problem of farmers and economy.
(e) All are correct.

Direction (96-98): The following sentences consist of three blanks. You are provided with three words that fits coherently in the sentence. Identify and mark the alternative catering the correct sequence of the words in which they must be filled to make the sentence contextually meaningful and grammatically correct.

96. With the _____ of the Reserve Bank of India's new bad loan _____framework that seeks greater _____ from banks, Kotak warned small and medium enterprise entities could also be hit and banks will have to improve their underwriting standards.
[I] Implementation
[II] Disclosures
[III] Resolution
(a) (I), (II), (III) (b) (II), (I), (III)
(c) (I), (III), (II) (d) (III), (II), (I)
(e) (III), (I), (II)

97. The department-related parliamentary _____, after reviewing the _____, said the bridge course should not be made a mandatory _____ in the present Bill.
[I] Proposal
[II] Provision
[III] Committee
(a) (I), (II), (III) (b) (II), (I), (III) (c) (I), (III), (II)
(d) (III), (II), (I) (e) (III), (I), (II)

98. Over the last year, the record of implementation of the steps in the peace accord has been _____, though major strides were made in the form of demilitarization and disbanding of the FARC and its _____into a _____ political force.
[I] Legitimate
[II] Conversion
[III] Patchy
(a) (I), (II), (III) (b) (II), (I), (III)
(c) (I), (III), (II) (d) (III), (II), (I)
(e) (III), (I), (II)

Direction (99-100): Given below are sentences with a blank that should be filled from the given alternatives. Identify the most suitable expression that fits in the most appropriate manner in the sentence making it grammatically and contextually correct.

99. Investment bank Goldman Sachs downgraded its forecasts for India's economy on Tuesday in the wake of a more than $2 billion fraud at Punjab National Bank, _____ regulation of the banking sector that would constrain credit growth.

(a) to warn a tighter spark
(b) warning it could spark tighter
(c) warned them could spark tighter
(d) has warned it could sparked tighter
(e) warnings were it could spark tighter

100._____ no fewer than 16 accidents/derailments were caused by inept track management across five railway zones, and loss-creating speed restrictions had been imposed on as many as 294 sections - on a permanent basis - because of deficient track-quality.
(a) Considering that between 2014 and 2017
(b) Since 2014 and 2017 expressed
(c) It questioned that while in 2014 and 2017
(d) Among 2014 and 2017 the note was
(e) It noted that between 2014 and 2017

Directions (101-105): Which of the phrases (a), (b), (c) and (d) given below each sentence should replace the phrase printed in **bold** letters to make the sentence grammatically correct? If the sentence is correct as it is, mark (e) i.e., "No correction required" as the answer.

101. The two Koreas have been divided along the world's most heavily fortified border **since 1950-53 ending Korean War with an armistice**, not a peace treaty.
(a) since the 1950-53 Korean War ended with an armistice
(b) as the Korean War has ended with an armistice since 1950-53
(c) after Korean War ended during 1950-53 with an armistice
(d) because the Korean War ended to an armistice during 1950-53
(e) No correction required.

102. The setting up of territorial nation-states in South Asia on the basis of religious or ethnic identities **cannot bring any improvements** in the lives of people.
(a) did not bring up any improvement
(b) have not brought about any improvement
(c) has not brought in the improvement
(d) could not bring any of the improvement
(e) No correction required

103. The annual election to choose five new non-permanent members of the UN Security Council **produced both the expected and the near preposterous**.
(a) has produced the unexpected and the near preposterous
(b) has been producing both the expected and preposterous event
(c) is both the expected and near preposterous
(d) produces both the expectation and near preposterous
(e) No correction required

104. Despite giving the fact that almost half the work force in the country is still engaged in farming, farmers' woes are naturally an important electoral plank.
(a) There is a fact that almost half
(b) Giving the fact that despite halving
(c) Given the fact that almost half of
(d) The fact that states almost half of
(e) No correction required

105. Tagore's views on nationalism as expressed in his speeches in the US in 1916 and in China in 1924 **as well were severely criticizing by both these countries**, although they were appreciated by Albert Einstein and Romain Rolland.
(a) had been criticized severely by both the countries
(b) were severely criticized in both these countries as well
(c) was severely criticizing in both these countries as well
(d) were criticizing severely at both the countries as well
(e) No correction required

Directions (106-110): Following questions have words given in bold each having five alternatives. Choose the word among the given options which has either most similar or most opposite meaning to the bold word.

106. MEEK
(a)Pejorative (b)Assertive (c)Behest
(d)Avid (e)Ubiquity

107. PETRIFY
(a)Appall (b)Unravel (c)Reek
(d)Invoke (e)Confiscate

108. FIGMENT
(a)Filth (b)Fervor (c)Altercation
(d)Incursion (e)Delusion

109. INNOCUOUS
(a)Pronounce (b)Importunate (c)Obnoxious
(d)Juxtapose (e)Affluent

110. PROSCRIBE
(a)Primitive (b)Condemn (c)Requite
(d)Circumvent (e)Precept

Directions (111-115): In the following passage there are blanks, each of which has been numbered. These numbers are printed below the passage and against each five words are suggested, one of which fits the blank appropriately. Find out the appropriate word in each case.
On October 2, 1983 the Grameen Bank Project **(111)** the Grameen Bank. We invited the Finance Minister to be the Chief Guest at our **(112)** ceremony. But when the Ministry came to **(113)** that the ceremony would take place in a remote district, they said it would not be an **(114)** place to launch a Bank and that the ceremony should be **(115)** in Dhaka so that all the top Government Officials could attend.

111. (a) reorganised (b) merged (c) named
(d) converted (e) became

112. (a) opening (b) closing (c) dedicated
(d) inaugurate (e) induction

113. (a) reveal (b) know (c) aware
(d) inform (e) acquaint

114. (a) excellent (b) available (c) inauspicious
(d) appropriate (e) obvious

115. (a) invited (b) assembled (c) done
(d) shifted (e) held

Directions (116-120): In the following questions, certain parts of the paragraph are highlighted, which suggest that they may or may not belong to the paragraph. There are five sentences given as options including the highlighted part against each number. Choose the option which suits best into the theme of the paragraph as well as to the contextual meaning of the sentence. If the highlighted portion does not require any replacement, choose option (e) i.e. "No replacement required" as your answer.

The British ruled India only on the strength of the British Indian army (**116**) **is likely to be reflected in the quality of work too**. Without this army, the British could never hold together, 'the jewel in the crown' and exploit its resources. Smartly, the British had raised the army on communal lines with regiments based on castes and (**117**) **communities to perpetuate feudal feelings and prevent the development of a national consciousness**. Netaji Subhas Bose realizing this raised an Indian National Army (INA) which had men of all castes and communities in mixed regiments and (**118**) **who made them leave India in a hurry**. The poorly equipped INA men (recruited in South-East Asia from Indian prisoners of war) (**119**) **were the real heroes whom led India to freedom**. 26,000 of the 60,000 INA soldiers perished on the battlefront. Being with the Axis Powers, they were on the losing side in World War II. Netaji disappeared after the conclusion of the World War and (**120**) **what happened to him thereafter remains a matter of conjecture** — albeit it is now proven that no air crash in which he is supposed to have died ever took place.

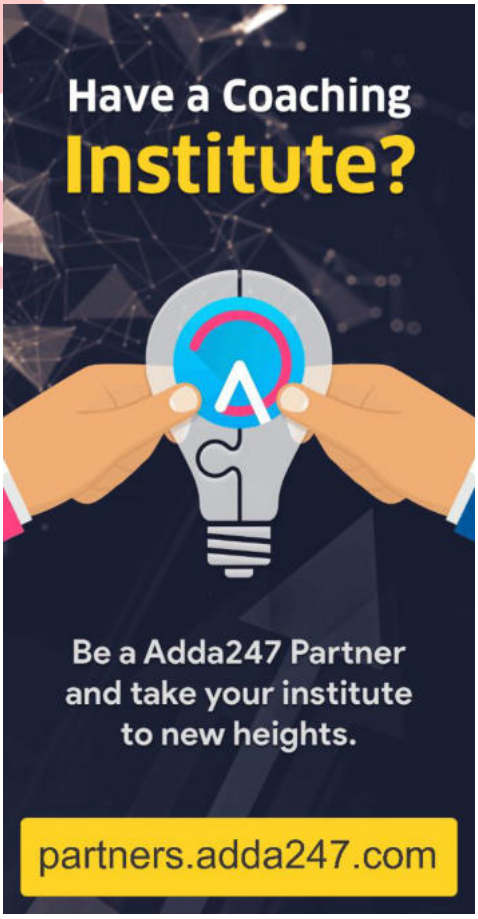
116. (a) among Indian soldiers who fought for the British.
(b) whose soldiers were Indians but officers were British.
(c) had weakened the foundation of the British Empire in India.
(d) which results in massive inequality of opportunity.
(e) No replacement required

117. (a) contained an intelligence assessment of the loyalty of Indian army officers.
(b) began fearing an encore of the 1857 rebellion.
(c) they realized that Indian forces could no longer be trusted to prop up the British.
(d) to keep India under British control would require a huge number of European troops.
(e) No replacement required

118. (a) which was not possible.
(b) who ate from the same kitchens.
(c) who could not be taken for granted.
(d) who held India only for trade and commercial interests.
(e) No replacement required

119. (a) were on the losing side in World War II.
(b) from the country in the event of an Indian rebellion.
(c) who delivered the final nail in the coffin of the imperial masters.
(d) fought valiantly on India's northeast borders but lost the battle.
(e) No replacement required

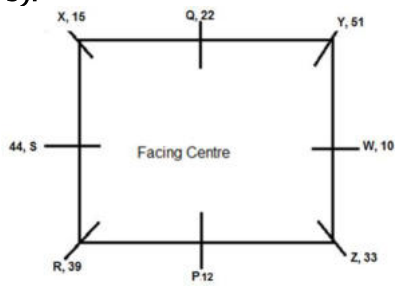
120. (a) it is hard to appreciate that this is palpably false and obfuscates the truth
(b) the Indian freedom struggle was written at the behest of the first rulers of Independent India
(c) sections of the armed forces became restive
(d) the INA activities of Bose had weakened the foundation of the British Empire in India
(e) No replacement required



Solutions

REASONING ABILITY

Directions (1-5):



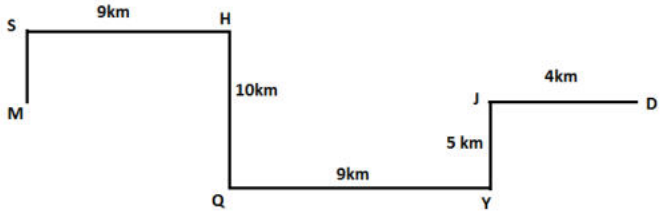
1. (e); 2. (d); 3. (b);

4. (a); 5. (d);

6. (c); For (a)- This can't be hypothesized from the given statement because preference in the sense of popularity has been given to mobile instead of T.V.
For (b)- This can't be hypothesized from the given statement because there is direct comparison between T.V and mobile phone in statement. There is nothing mentioned about outdoor activities in the statement.
For (c)- This can be hypothesized from the given statement as it is mentioned in the given statement that youngsters spend most of their time on mobile phones.
For (d)- This can't be hypothesized from the given statement because nothing is mentioned about that older generation is comfortable in using mobile phones or not.
For (e)- This can't be hypothesized from the given statement because it is a course of action, it cannot be an assumption.

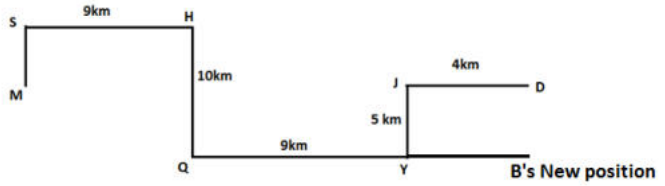
7. (d); For (a)-This can't be assumed from the given statement because there is no any comparison between mosquitoes and other animals in the statement.
For (b)- This can't be assumed from the given statement because Zika, Dengue and Chikungunya are considered as dangerous diseases but is not said anything about treatment of these diseases.
For (c)- This can't be assumed from the given statement there is no discussion about any stats in the statement.
For (d)- This can be assumed from the given statement as it is mentioned in the given statement that Protect yourself and your family from mosquitoes during travelling. so it can be assumed that there are more chances to get infected from mosquitoes while travelling.
For (e)- This can't be assumed from the given statement because there is only a suggestion that protect yourself and your family from mosquitoes during traveling , it does not mean all travelers are suffering from mentioned diseases.

Directions (8-11):



8. (c);

9. (a);



10. (a); 11. (c);

Directions (12-16):

Month	Date	Persons	Colour/Fruit
March	7	E	APPLE
March	9	B	GREEN
March	16	A	YELLOW
March	19	D	BANANA
July	7	F	CHERRY
July	9	H	RED
July	16	G	BLUE
July	19	C	MANGO

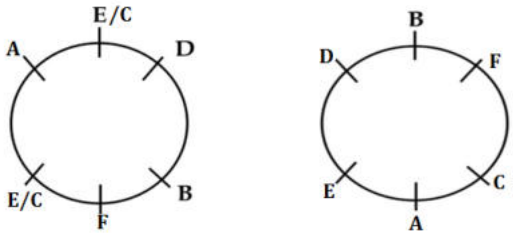
12. (a); 13. (b); 14. (a);

15. (a); 16. (c);

Directions (17-21):

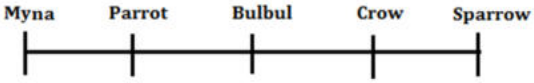
17. (c); Either from Statement I or Statement II we get our final answer. The code for 'Festival' is 'ni'.

18. (d); From-I From, II



19. (e); From Statement I and II together we get our final answer. E is the second tallest.
D > E > C > A > F > B.

20. (e); From statement I and II, we get our final answer i.e. Bulbul sits second to the left of sparrow.



21. (d); From statement I and II together we can't get our final answer as either P or S sits on the fourth floor.

5. Q
4. P/S
3. R
2. P/S
1. T

Directions (22-26):

Person	Date	City
Q	7th	Pune
R	9th	Pune
S	9th	Patna
T	7th	Chandigarh
U	9th	Patna
V	7th	Kochi
W	4th	Patna
X	7th	Patna
Y	4th	Kochi
Z	2nd	Pune

22. (d); **23. (e);** **24. (c);**

25. (d); **26. (a);**

27. (c); For (a)- This can't be the reason behind more number of accidents at night as population increase could not lead to more number of accidents during night.
For (b)- This could not be the appropriate reason as preference does not matter too much for the reason of death during night time.
For (c)- This could be the major cause behind more number of accidents at night as improper installation of traffic signal and lightning arrangement is the major reason behind it.
For (d)- This could not be the major cause of the given statement as the traffic rules are same in both day and night time also.
For (e)- This could not be the major cause behind more number of accidents at night as Traffic violation is a punishable offence in India.

Directions (28-32):

Logic: - There are six numbers and six words in the input. In the first step the numbers are arranged in ascending order from both the ends with a natural number starting from 1 at unit place in left end number and with a natural number 2 at unit place in right end number. After that in second step the words are arranged in alphabetical order from both the ends. And then again number are arranged in third step and words are arranged in forth step and so on.

Input: peak 18 utility 76 emerge 27 beautiful 37 51 visible 86 know

Step I: 181 peak utility 76 emerge beautiful 37 51 visible 86 know 272

Step II: beautiful 181 peak utility 76 37 51 visible 86 know 272 emerge

Step III: 373 beautiful 181 peak utility 76 visible 86 know 272 emerge 514

Step IV: know 373 beautiful181 utility 76 visible 86 272 emerge 514 peak

Step V: 765 know 373 beautiful181 utility visible 272 emerge 514 peak 866

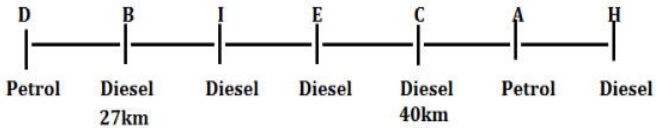
Step VI: utility 765 know 373 beautiful181 272 emerge 514 peak 866 visible

28. (d); **29. (c);** **30. (d);**

31. (b); **32. (b);**

33. (c); For (a)- This statement does not substantiates the given statement as it mentioned that Our education system today encourages excellence whereas given statement states that Education has been a problem in our country.
For (b)- This statement does not substantiates the given statement because it mentioned that Our new education system creates entrepreneurs and foundation of a knowledge based economy.
For (c)- This statement substantiates the given statement as it mentioned that India needs internet and technology if it has to teach all population in remote villages which is also mentioned in the given statement that Half the country does not even today have access to proper education, and only a small fraction can go to university.
For (d)- This statement does not substantiates the given statement because it mentioned that Our education system is geared towards teaching and testing knowledge whereas given statement states that Education has been a problem in our country.
For (e)- This statement does not substantiates the given statement because it mentioned that We may have the most number of engineering graduates in the world whereas given statement states that Half the country does not even today have access to proper education, and only a small fraction can go to university.

Directions (34-38):



34. (c); **35. (d);** **36. (c);**

37. (a); **38. (a);**

39. (b); **For (a)** It may be the possible approach but can't be the best suited option as dowry is like stubborn custom which cannot be eradicate easily.
For (b) It will be the best suited option as it is necessary to change the thinking of people but most

important thing is to make dowry system as illegal and make it as punishable offence.

For (c) It will not make any major changes in the thinking of persons.

For (d) It is right that it has been set in the nerves of people as one of the necessities but it has not suggested any action to get out this stubborn custom.

For (e) It will make some impact all over India, as others states will follow Mr. Kumar but this step will not uproot it.

40. (a); In the above question we have to find which statements do not support the given statement.

For I-This statement is in line with the above statement because it supports the given statement as it describes that the meeting between Trump and Modi will strengthen the ties between India and US.

For II-This statement is not in line with the given statement as it states about Narendra Modi's visit to Sri lanka whereas the given statement describes Modi's first meeting with Trump.

For III-This statement is also in line with the given statement as it describes that the meeting of Modi and Trump will further make strong bilateral relation between both the countries.

For IV-This is also in line with the given statement because this statement states that this meeting will give an opportunity to make strong partnership between India and US.

QUANTITATIVE APTITUDE

41. (c); Offline contestant in village A $= \frac{350}{56} \times 44 = 275$

contestant who complete the survey online
$= 350 - 61 = 289$
contestant who complete the survey offline
$= 275 - 61 = 214$
$\therefore$ Required % $= \frac{289 - 214}{214} \times 100 \approx 35\%$

42. (a); Total no. of contestant from village C who complete the survey
$= \left[465 + \left(\frac{465}{60} \times 40\right)\right] - 108 \approx 667$
Total no. of contestant from village B who complete the survey
$= \left[560 + \left(\frac{560}{35} \times 65\right)\right] - 92 = 1508$
$\therefore$ Required number $= 1508 - 667 = 841$

43. (c); contestant who didn't completed the survey online $= \frac{8}{19} \times 190 = 80$
contestant who didn't completed the survey offline $= \frac{11}{19} \times 190 = 110$
$\therefore$ Males contestant who completed the survey online
$= \frac{65}{100} \times (480 - 80) = 260$
and
females contestants who completed the survey offline
$= \frac{60}{100} \times \left(\frac{480}{40} \times 60 - 110\right) = 366$
$\therefore$ Required difference $=$ (720 –110–366) – (480 – 80 – 260) = 244 – 140 =104

44 (d); Offline contestants of village C
$= \frac{465}{60} \times 40 = 310$
Offline contestants of village A
$= \frac{350}{56} \times 44 = 275$
$\therefore$ Required difference $= 35$

45. (a); Required sum
$= \frac{350}{56} \times 12 + \frac{560}{35} \times 30 + \frac{465}{60} \times 20 + \frac{480}{40} \times 20$
$= 75 + 480 + 155 + 240 = 950$

46. (d); Number of contestants, who complete the survey online and offline from village C
$= \frac{465}{60} \times 100 - 108 = 667$
and number of contentstants participants from village D
$\frac{480}{40} \times 100 = 1200$
$\therefore$ Required percentage $= \frac{667}{1200} \times 100 = 56\%$

47. (b);

(A's profit)	:	(B's profit)	:	(c's profit)
$= 600 \times 12$	:	500×4	:	$5x \times 8$
$= 180$	:	50	:	x

$\therefore$ C's profit $= \frac{x}{230 + x} \times 24000$

$\Rightarrow \frac{x}{230 + x} \times 24000 = 5600$
$\Rightarrow 30x = 1610 + 7x$
$\Rightarrow x = 70\%$

48. (a); Length of platform $= 21 \times 19 - 216 = 183$ m
Let n boxes are added
$216 + 183 + 21n = 21 \times 26$
$\Rightarrow 21n = 147$
$\Rightarrow n = 7$

49. (d); B will complete the work alone in
$= \frac{3}{4} \times 36 = 27$ days

A — 36 3

108

B — 27 4

Let total units of work = 108

No. of units done by A in 1 day = 3

No. of units done by B in 1 day = 4

Total work done in 2 days = 7 units

Work done in 30 days = 7 × 15 = 105 units

Remaining work will be done by A in $\frac{108-105}{3}$

= 1 day.

∴ Total days taken = 31 days

50. (c); Let's total salary of Rakesh = 100 %

12% of the salary is added as PPF.

Remaining Part = (100 – 12) = 88%

Amount spent on clothes = $\frac{3}{8}$ of 88% = 33%

Difference between PPF and cloth expanses = 33 - 12 = 21% of salary = 10500

Total salary = 50000

Other expanses = House Rent expanses + 1500

House Rent expanses + Other expanses = (100 - 33 - 12)% of salary

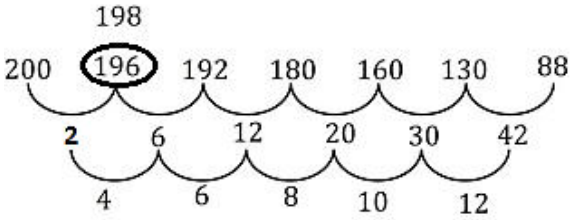
= 55% of salary = 27500

House Rent expanses + House Rent expanses + 1500 = 27500

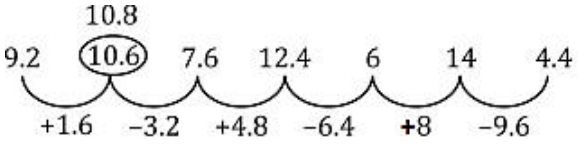
2 × House Rent expanses = 27500 - 1500 = 26000

House Rent expanses = 13000

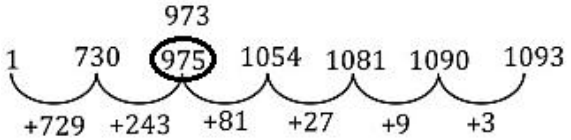
51. (b);



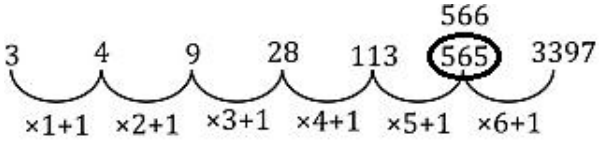
52. (a);



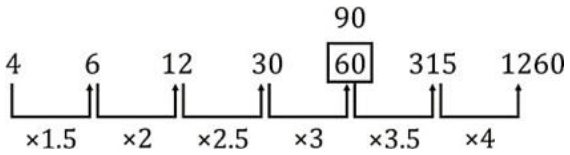
53. (b);



54. (c);



55. (c);



56. (b); Players from Club 'D' who play either of Cricket or Football

$= 2400 \times \frac{12}{100} + 3200 \times \frac{20}{100}$

$= 288 + 640 = 928$

Players of football from both club 'C' and 'E'

$= 3200 \times \frac{(13+21)}{100} = 1088$

∴ Required diff = 1088 – 928 = 160

57. (c); Male players from club 'E' who play either of Cricket or Football

$= \left[2400 \times \frac{24}{100} + 3200 \times \frac{21}{100}\right] \times \frac{9}{16}$

$= [576 + 672] \times \frac{9}{16} = 1248 \times \frac{9}{16} = 702$

Players from club 'F' who playing football

$= 3200 \times \frac{5}{100} = 160$

Required percentage= $\frac{702}{160} \times 100 = 438\frac{3}{4}\%$

58. (a); Female players from club 'E' playing cricket

$= 2400 \times \frac{24}{100} \times \frac{7}{12} = 336$

Female players from club 'C' playing football

$= 3200 \times \frac{13}{100} \times \frac{6}{13} = 192$

Required sum = 336 + 192 = 528

59. (d); Players of club D and B who play football

$= 3200 \times \frac{36}{100} = 1152$

Players of club D and F who playing Cricket

$= 2400 \times \frac{23}{100} = 552$

∴ Required %= $\frac{(1152-552)}{552} \times 100 \approx 108.7\% = 109\%$

60. (b); Players who play Cricket from both club A and C

$= 2400 \times \frac{33}{100} = 792$

Players who playing Football from Club B, D and F together

$= 3200 \times \frac{41}{100} = 1312$

∴ Required difference = 1312 – 792 = 520

61. (d); Probability of drawing one green ball

$= \frac{x}{12+x} = \frac{2}{5} \Rightarrow x = 8$

∴ Required probability = $\frac{{}^{2}C^{2}}{{}^{15}C^{2}} = \frac{5\times4}{15\times14} = \frac{2}{21}$

62. (a); A + B = 41 ...(i)

C -1 = A + 2

C = A + 3

And

A + 4 = B - 1

⇒ B = A + 5 ...(ii)

From (i) + (ii)
A = 18 years
B = 18 + 5 = 23 years
C = 18 + 3 = 21 years
$\frac{A}{D} = \frac{3}{4}$ D = $\frac{4}{3} \times 18 = 24$ years
∴ Required difference = 24 – 21 = 3 years

63. (a); Radius of cylinder = side of equilateral Δ

$\therefore \frac{\sqrt{3}}{4}a^2 = 16\sqrt{3}$, where a = sides of Δ
$\therefore a^2 = 64$
$\Rightarrow$ a = 8 cm
And, height of cylinder = 3 × 8 = 24 cm
∴ Volume of cylinder = $\pi r^2 h$
$= \pi \times 8^2 \times 24 = 1536\ \pi\ cm^3$

64. (b); Compound interest earned in 2 years

$= 8000\left[\left(1+\frac{20}{100}\right)^2\right] - 8000 = 3520$

Let amount invested in another scheme is Rs. P.
$3520 = 500\%$ of $\frac{P \times 8 \times 4}{100}$
$\Rightarrow P = \frac{3520 \times 100}{32 \times 5}$
$\Rightarrow$ P = 2200
∴ Total investment = 8000 + 2200 = 10,200

65. (a); In 1000 ml of mixture,
Alcohol = 700 ml
Water = 300 ml
Let x ml of alcohol is mixed.
According to question
$\frac{300}{1000+x} = \frac{15}{100}$
6000 = 3000 + 3x
X= 1000 ml

66. (e); $2\pi r^2 = 616$
$r^2 = \frac{616}{2} \times \frac{7}{22}$
$r^2 = 98$
∴ Volume = $\frac{2}{3}\pi r^3$
$= \frac{2}{3} \times \frac{22}{7} \times 98 \times 7\sqrt{2} = 2032.69\ cm^3$

67. (b); J : A = 6 : 11
A) 11x − 6x = 25
So we can find out ratio of their age 5 year ago.
B) (11x + 5) − (6x + 5) = 25
C) 11x + 6x = 85

68. (e); Cost price per unit is not given.

69. (e); $8M + 6W = \frac{1}{21}$
$1.5(8W + 6W) = 1.5 \times \frac{1}{21}$
$12M + 9W = \frac{1}{14}$
Work will be completed in 14 days. No information is required.

70. (d); Question can't be answered because direction of movement of the trains are not given.

71. (c); Invalid voter of village C in 2005
$= 4000 \times \frac{36}{64} = 2250$
Valid voter of village C in 2001
$= 4000 \times \frac{19}{25} = 3040$
Now, invalid voter of village C in 2001
$3040 \times \frac{24}{76} = 960$
∴ Required diff. = 2250 – 960 = 1290

72. (a); Total valid votes of village A in 2005
$= 2500 \times \frac{100}{20} \times \frac{80}{100}$
= 10,000
Total valid votes excluding Nota in village A in 2005
$= 10{,}000 \times \frac{90}{100} = 9{,}000$
∴ According to que.
x + (x + 200) = 9000
$\Rightarrow$ x = 4400
Required no. of votes of loosing candidates = 4400

73. (b); Let the total voters in 2005 are x.
Total voters in 2001
$= \left(1+\frac{3}{23}\right)x = \frac{26}{23}x$
∴ Required ratio = $\frac{x \times \frac{26}{23} \times \frac{25}{100}}{x \times \frac{25}{100}} = \frac{130}{161}$

74. (d); Total invalid male of village E in 2001 = 2000 – 1600
= 400
Total valid voters in 2001
$= 1600 \times \frac{100}{64} = 2500$
Total voters in 2001 $= 2500 \times \frac{100}{80} = 3125$
∴ Required % $= \frac{400}{3125} \times 100 = 12.8\%$

75. (c); Let total voters of village B in 2001 = x
& Total voters of village D in 2005 = y
$\therefore \frac{x \times \frac{75}{100}}{y \times \frac{30}{100}} = \frac{16}{3} \Rightarrow \frac{x}{y} = \frac{32}{15}$
∴ Required % $= \frac{17}{32} \times 100 = 53\frac{1}{8}\%$

Solutions (76-80): Let number of chairs, tables and wardrobes sold by A in August be 42x, 36x and 23x. Also, let chairs sold by A in August, September and October be 14y, 23y and 27y respectively.
∴ 42x = 14y $\Rightarrow$ y = 3x
and, 23x = 23y – 230
$\Rightarrow$ x = 5 and y = 15
Now,
Chairs sold by B in September = 665 – 345 = 320
Chairs sold by B in August = 320
Tables sold by B in September
= Chairs sold by A in Aug = 210
∴ Table sold by A in September = 400 – 210 = 190
Wardrobes sold by B in September = wardrobes sold by A in Aug = 115
∴ Wardrobes sold by A in September = 210 – 115 = 95
Chairs sold by B in October = 1025 – 320 – 320 = 385
Tables sold by A in October
= (1025 – 480) – (180 + 190) = 175

Tables sold by B in August $= \frac{11}{12} \times 180 = 165$

Tables sold by B in October $= \frac{38}{35} \times 175 = 190$

Wardrobes sold by B in August $= 1075 - (210 + 320 + 180 + 165 + 115) = 85$

Let wardrobes sold by A in October be a and that by B be b in October

$\therefore a = b - 35$ and $a + b = 205$

$\Rightarrow a = 85$ and $b = 120$

Months	Chair		Table		Wardrobe	
	A	B	A	B	A	B
Aug	210	320	180	165	115	85
Sep	345	320	190	210	95	115
Oct	405	385	175	190	85	120

76. (c); Total chairs sold by B in September and October = 320 + 385 = 705

77. (a); Required percentage $= \frac{175-120}{120} \times 100 = 45\frac{5}{6}\%$

78. (d); Asked difference = 320 – 210 = 110

79. (b); Required ratio $= \frac{180}{210} = \frac{6}{7}$

80. (b); Wardrobes sold by B in Oct = 120

ENGLISH LANGUAGE

81. (b); Refer the first paragraph, "According to data from the Reserve Bank of India (RBI), the rate of growth of the combined exports of software and ITs fell from 20.8 per cent in 2012-13 to 14.9 per cent in 2014-15 and to a low of 7.3 per cent in 2015-16." Hence only statement (II) is the correct reason.

82. (e); Refer the last few lines of first paragraph, "India's IT industry recorded remarkable growth over a long period because it exploited an outsourcing opportunity by perfecting a global delivery model for software and ITeS based on cheap skilled labour." and the first few lines of second paragraph, "As a result, IT industry revenues grew in double digits, with export earnings accounting for a large share of those revenues. Employment grew rapidly, albeit from a low base and at a lower pace than revenues." Hence all three statements are correct in context of the passage.

83. (d); Refer the first few sentences of the third paragraph, "However, there were a number of features of that model that made it vulnerable to changes in circumstances. To start with, it had a high degree of dependence on exports for growth, with the U.S. accounting for a very large share of those exports…" and the first sentence of the fourth paragraph, "Secondly, software services (or code writing and customisation of different levels of sophistication) and ITeS, rather than IT products, accounted for an overwhelming share of revenues." Hence both the statements (b) and (c) are correct in context of the passage.

84. (b); Refer the statements, "In 2002-03, 48 per cent of India's exports of IT services was through the medium of a commercial presence on foreign soil and another 13.5 per cent through the presence of natural persons.", "This combination of the characteristics of India's IT success not only gave the industry a position of privilege in the economy but made it the symbol of India's ostensible post-globalisation success." and "To garner those revenues, a workforce with essential IT skills and familiarity with English, communication infrastructure, and the requisite organisation were the necessary ingredients." Hence only statement (II) is true in context of the passage.

85. (a); Refer the first paragraph, "According to data from the Reserve Bank of India (RBI), the rate of growth of the combined exports of software and ITeS fell from 20.8 per cent in 2012-13 to 14.9 per cent in 2014-15 and to a low of 7.3 per cent in 2015-16. Global circumstances combined with the specific nature of India's IT prowess seem to be responsible for this fall." Hence (a) is the correct option in context of the passage.

86. (a); Prowess means skill or expertise in a particular activity or field. Dexterity means skill in performing tasks, especially with the hands. Hence both are similar in meanings.
Serenity means the state of being calm, peaceful, and untroubled.

87. (e); Garner means gather or collect (something, especially information or approval). Hence "amass" is the word most similar in meaning to it.

88. (c); Imperative means a factor or influence making something necessary. Hence 'vital' is the word most similar in meaning to it.
Supple means bending and moving easily and gracefully; flexible.
Mercurial means subject to sudden or unpredictable changes of mood or mind.

89. (b); Ostensible means stated or appearing to be true, but not necessarily so. Hence 'genuine' is the word most opposite in meaning to it.
Avowed means that has been asserted, admitted, or stated publicly.

90. (b); Customize means modify (something) to suit a particular individual or task. Hence 'standard' is the word most opposite in meaning to it.
Sustenance means the maintaining of someone or something in life or existence.

91. (b); Refer to the fourth sentence of second paragraph, "The rural distress in such situations often prompts States or the Centre to offer relief — reduction or complete waiver of loans." Hence (b) is the correct option in context of the passage.

92. (d); Refer the fourth paragraph, "Repeated debt-waiver programmes distort households' incentive structures, away from productive investments and towards unproductive consumption and wilful defaults." and "Such measures can erode credit discipline and may make banks wary of lending to farmers in the future." Hence both (a) and (c) are true in context of the passage.

93. (d); Refer to the sixth paragraph, "India needs massive investment in areas such as irrigation, water conservation, better storage facilities," and "The problems in Indian agriculture are structural. They need long-term solutions." Hence both the options (ii) and (iii) are correct.

94. (b); The author in the passage emphasized on the disadvantages of loan waiving scheme to the economy and also he has mentioned the steps that need to be implemented. Hence the title "The hazards of farm loan waivers" is the most appropriate one.

95. (d); Refer to the last paragraph, "Loan waivers will only end up complicating the problem". Hence statement (d) is false in context of the passage.

96. (..); The correct sequence of the words to be filled in the sentence is (I), (III), (II) to gain a grammatically correct and contextually meaningful sentence. Thus, the sentence formed is "With the implementation of the Reserve Bank of India's new bad loan resolution framework that seeks greater disclosures from banks, Kotak warned small and medium enterprise entities could also be hit and banks will have to improve their underwriting standards." Hence, option (c) is the most suitable choice.
Implementation means the process of putting a decision or plan into effect; execution.
Disclosures means the action of making new or secret information known.
Resolution means a firm decision to do or not to do something.

97. (e); The correct sequence of the words to be filled in the sentence is (III), (I), (II) to gain a grammatically correct and contextually meaningful sentence. Thus, the sentence formed is "The department-related parliamentary committee, after reviewing the proposal, said the bridge course should not be made a mandatory provision in the present Bill." Therefore, option (e) becomes the most viable choice.
Proposal means a plan or suggestion, especially a formal or written one, put forward for consideration by others.
Provision means the action of providing or supplying something for use.
Committee means a group of people appointed for a specific function by a larger group and typically consisting of members of that group.

98. (d); The correct sequence of the words to be filled in the sentence is (III), (II), (I) to gain a grammatically correct and contextually meaningful sentence. Thus, the sentence formed is "Over the last year, the record of implementation of the steps in the peace accord has been patchy, though major strides were made in the form of demilitarization and disbanding of the FARC and its conversion into a legitimate political force." Therefore, Option (d) becomes the most suitable answer choice.
Legitimate means conforming to the law or to rules.
Conversion means the process of changing or causing something to change from one form to another.
Patchy means existing or happening in small, isolated areas.

99. (b); The expression "warning it could spark tighter" aptly fits in the blank making the sentence coherent and logical. All the other expressions are either grammatically incorrect or contextually irrelevant. Thus, forming the sentence as "Investment bank Goldman Sachs downgraded its forecasts for India's economy on Tuesday in the wake of a more than $2 billion fraud at Punjab National Bank, warning it could spark tighter regulation of the banking sector that would constrain credit growth." Hence, option (b) becomes the most viable answer choice.

100. (e); The expression that fits appropriately in the blank is "It noted that between 2014 and 2017". It justifies the contextual meaning of the sentence and provides coherence to it. All the other alternatives fail to comprehend the grammatical syntax of the sentence. Thus, the sentence formed is "It noted that between 2014 and 2017 no fewer than 16 accidents/derailments were caused by inept track management across five railway zones, and loss-creating speed restrictions had been imposed on as many as 294 sections - on a permanent basis - because of deficient track-quality." Hence, option (e) is the most suitable answer choice.

101. (a); "since the 1950-53 Korean War ended with an armistice" is the correct phrase to replace the bold part as 'since' in this case is used to describe the reason. Hence (a) is the correct option.

102. (b); "have not brought about any improvement" is the correct phrase replacement as the phrase "bring about" means to make something happen, especially to cause changes in a situation. Hence (b) is the correct option.

103. (e); The given sentence is grammatically correct.

104. (c); "Given the fact that almost half of" is the correct phrase replacement as it makes the sentence grammatically correct. Other options are grammatically incorrect. So (c) is the correct choice.

105. (b); As the sentence is in passive form, "were severely criticized in both these countries as well" is the correct phrase to make the sentence grammatically correct.

106. (b); The word "meek" means quiet, gentle, and easily imposed on; submissive. The word "assertive" means having or showing a confident and forceful personality. Hence both are opposite in meanings to each other.
Pejorative means expressing contempt or disapproval.
Behest means a person's orders or command.
Avid means having or showing a keen interest in or enthusiasm for something.
Ubiquity means the fact of appearing everywhere or of being very common.

107. (a); The word "petrify" means make (someone) so frightened that they are unable to move. The word "appall" means greatly dismay or horrify. Hence both these words are similar in meanings to each other.
Unravel means investigate and solve or explain (something complicated or puzzling).
Reek means smell strongly and unpleasantly; stink.
Invoke means give rise to; evoke.
Confiscate means take or seize (someone's property) with authority.

108. (e); The word "figment" means a thing that someone believes to be real but that exists only in their imagination. The word "delusion" means the action of deluding or the state of being deluded. Hence both are similar in meanings to each other.
Filth means disgusting dirt.
Fervor means intense and passionate feeling.
Altercation means a noisy argument or disagreement, especially in public.
Incursion means an invasion or attack, especially a sudden or brief one.

109. (c); The word "innocuous" means not harmful or offensive. The word "obnoxious" means extremely unpleasant. Hence both are opposite in meanings.
Pronounce means declare or announce in a formal or solemn way.
Importunate means persistent, especially to the point of annoyance.
Juxtapose means place or deal with close together for contrasting effect.
Affluent means (especially of a group or area) having a great deal of money; wealthy.

110. (b); The word "proscribe" means denounce or condemn. Hence the word is similar in meaning to the word "condemn". Hence option (b) is the correct choice.
Primitive means relating to, denoting, or preserving the character of an early stage in the evolutionary or historical development of something.
Requite means make appropriate return for (a favour, service, or wrongdoing).
Circumvent means overcome (a problem or difficulty) in a clever and surreptitious way.
Precept means a general rule intended to regulate behaviour or thought.

111. (e); **112. (a);** **113. (b);**

114. (d); **115. (e);**

116. (b); The given highlighted portion in the paragraph does not make the sentence meaningful and it gives an incomplete sense to the paragraph. Among the given options, only statement (b) finds a logical attachment with the theme of the paragraph which is about the Indian soldiers who fought for and against British army. It is to be noted that the first sentence generates a clear idea about the British Indian army whose soldiers were Indians but officers were British i.e. the highlighted portion should be replaced by that statement which further explains the meaning of the term. Other choices given as options are irrelevant in the context of their usage in the sentence. Hence option (b) is the correct choice.

117. (e); The given statement does not require any replacement as it correctly follows the theme of the paragraph. It complements the prior part of the sentence contextually and thus gives a complete meaning to the sentence. All other options are out of the context. Hence option (e) is the correct choice.

118. (b); Read the given sentence carefully, there is a mention of different sections of people who formed the part of Indian National Army (INA). The highlighted portion should complement its prior part which is not happening in this case, it should be replaced by the expression which follows the former part. Among the given options, only expression (b) gives the exact meaning to the sentence. Other options are unsuitable and irrelevant. Hence option (b) is the correct choice.

119. (d); The highlighted portion in the sentence is completely incorrect as it gives a contrast meaning to the sentence. It doesn't follow its previous part which states that INA men were poorly equipped. Among the given options, only expression (d) can be matched with the idea behind the sentence. The expression gives a logical meaning to the sentence and thus allows it to follow the paragraph coherently. Other options can be ignored owing to their variable meanings to the sentence. Hence option (d) is the correct choice.

120. (e); Read the sentence carefully, it is quite clear that the sentence is complete and meaningful. It doesn't require any replacement as it correctly follows the theme of the paragraph. Hence option (e) is the correct choice.

REASONING ABILITY

Directions (1-5): Study the following information carefully to answer the given question.
Twelve people are sitting in two parallel rows containing six people each, in such a way that there is an equal distance between adjacent persons. In row-1 A, B, C, D, E and F are seated and all of them are facing south. In row-2 P, Q, R, S, T and U are seated and all of them are facing north. Therefore, in the given seating arrangement each member seated in a row faces another member of the other row. U sits third to right of S. S faces F and F does not sit at any of the extreme ends of the line. D sits third to right of C. R faces C. The one facing E sits third to right of P. B and P do not sit at the extreme ends of the line. T is not an immediate neighbour of U and A is not an immediate neighbor of C.

1. Who amongst the following represent the people sitting at extreme ends of the rows?
(a) RF (b) TA (c) DR
(d) CQ (e) SA

2. Four of the following five are alike in a certain way and thus form a group. Which is the one that does not belong to that group?
(a) B–T (b) A–Q (c) C–S
(d) F–P (e) D–R

3. Who amongst the following faces D?
(a) T (b) P (c) Q
(d) R (e) None of these

4. Four of the following five are alike in a certain way and thus form a group, which is the one that does not belong to that group?
(a) D (b) S (c) U
(d) T (e) A

5. How many persons are sitting between R and T?
(a) One (b) Two (c) Three
(d) Four (e) None of these

6. Men start walking towards East from Point A. Before taking a right turn he moves 5 meters. Now he moves 4 meters and then after taking a right turn he moves 2 meters and reaches point D. then in which direction point A with respect to point D?
(a) South (b) North-West
(c) South-East (d) North
(e) None of these

Directions (7): This question consists of four statements followed by five conclusions. Consider the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions does not logically follow from the given statements using all statements together.

7. **Statements:** All salary are funds.
Some funds are trajory.
All trajory are white.
All white are paisa.
Conclusions: (a)Some paisa are fund.
(b) All white being salary is a possibility.
(c) At least some paisa are trajory.
(d) All white can be Paisa.
(e) Some funds are white.

8. If A is brother of K and K is married to J. F is the mother of J and Y is the only child of K. Then how is A related to Y?
(a) Father (b) Brother-in-law
(c) Uncle (d) Can't be determined
(e) Brother

9. Kapil has twelve years of typing experience behind him; therefore, if you are looking for an efficient typist to enter your data into the new system, you need look no further.
The speaker assumes that:
(a) Twelve years of practice ensures typing efficiency.
(b) The type of typing required for the new system is identical to what Kapil has been doing.
(c) Kapil's job profile is the best that the new employer is going to get.
(d) Kapil is an outstandingly fast and accurate typist.
(e) Kapil will fit well into the new office.

Directions (10-14): Each of the questions given below consists of a question and two statements numbered I and II. You have to decide whether the data provided in the statements are sufficient to answer the question.
(a) If statement I alone is sufficient to answer the question, but statement II by itself is not sufficient to answer the question.
(b) If statement II by itself is sufficient to answer the question, but statement I alone is not sufficient to answer the question.

(c) If statement either I or II is sufficient to answer the question.
(d) If both the statements I and II taken together are not sufficient to answer the question.
(e) If both the statements I and II taken together are sufficient to answer the question.

10. There are six persons P, Q, R, S, T and U sitting around a circular table. Who is on the immediate right of T?
I. Only U is sitting between T and P.
II. P is third to the right of S.

11. What is the code for 'book' in a code language?
I. In that language `pik tik rik' means 'I like reading' and 'mik nek bek fek' means 'this book is interesting'.
II. In the same language 'pik tik mik rik' means 'I like reading book' and 'mik juk pan' means 'you read book'.

12. Who is Kavita's sister?
I. Sapna is the granddaughter of Amit, who is the father of Kavita's father.
II. The name of Kavita's sister starts with the letter 'S'.

13. Which of the following month does Pooja birthday?
I. Her brother remembers that her birthday is after March but before October.
II. Her mother remembers that her birthday is after May but before September. And birthday on that month which has more than 30 days.

14. What is the rank of Sohan in a class of 12 students?
I. Mahesh is fourth from the top. Sagar is fourth rank below Mahesh. Sohan is either immediate above or immediate below Sagar.
II. Riti is second from the top and Harish is sixth from the bottom. Meena is immediate below of Riti. Sagar is fifth rank below of Meena.

15. Most of the private companies have decided against awarding annual increase in the salaries of their employees for the previous year due to current economic situations.
Which of the following assumptions is/are implicit in the statement?
(I) Majority of the employees may leave their job to protest against the decision.
(II) These companies may announce hike in salaries next year.
(a) Only I (b) Only II
(c) Both I and II (d) Either I or II
(e) Neither I nor II

Directions (16-20): Study the following information carefully to answer the given question.
Seven different boxes namely P, Q, R, S, T, U, V having different no. of articles in it placed one above the other. No. Of articles is 2, 6, 9, 11, 15, 16, 20. The following information is given below.
There are two boxes lies between box S and the box in which there is 11 articles. Two boxes are placed between box P and the box in which there is 9 articles. There are only three boxes lies between box T and the box which have 9 articles . Box S is placed below box P. Box U is immediately below the box which has 15 articles. Box P doesn't have 15 articles in it. Only one box is there between box Q and box V. There are two boxes between the boxes having 15 and 6 articles. Box S lies above the box having 11 articles. The difference between no of articles in the box S and the box which lies just above box S is greater than 10. The number of articles in the box which lies just above box V is less than the no. of articles in V . Box Q does not have 6 number of articles. Box U does not have less than 10 articles in it.

16. How many boxes is/are there between S and U?
(a) One (b) Two (c) Three
(d) Four (e) None

17. How many articles are there in the box 'S'?
(a) 11 (b) 15 (c) 20
(d) 16 (e) Can't be determined.

18. Find the pair of articles and boxes which is not correct?
(a) Q-16 (b) U-11 (c) P-2
(d) V-6 (e) None of these

19. Which of the following condition is correct regarding the box which contains 2 articles in it with respect to T?
(a) There are only one box between the box T and the box which contains 20 articles.
(b) Box T is immediately above the box which contains 2 articles.
(c) Box which contains 2 articles is immediately above box T.
(d) All of the above is true
(e) None of the above is true.

20. Box P contains how many articles?
(a) 15 (b) 16 (c) 6
(d) 11 (e) None of these.

Direction (21-25): In each of the questions below are given four statements followed by three conclusions numbered I & II. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.
(a) If only conclusion II is true
(b) If only conclusion I is true

(c) If both conclusion I and II are true
(d) If either conclusion I or II is true
(e) If neither conclusion I nor II is true

21. Statements: Some roses are jasmines.
Some jasmines are lilies.
All lilies are marigolds.
All marigolds are sunflowers.
Conclusions: I. All lilies are sunflowers.
II. Some jasmines are marigolds.

22. Statements: Some flats are houses.
Some houses are bungalows.
No bungalow is hotel.
All hotels are restaurants.
Conclusions: **I.** No bungalow is restaurant.
II. Some houses are hotels.

23. Statements: All papayas are fruit.
No fruit are orange.
Some orange are honey
Conclusions: **I.** Some honey are not fruit.
II. No papaya are orange.

24. Statements: Some flats are houses.
Some houses are bungalows.
No bungalow is hotel.
All hotels are restaurants.
Conclusions: **I.** Some houses are not hotels.
II. Some houses are not restaurants.

25. Statements: Some roses are jasmines.
Some jasmines are lilies.
All lilies are marigolds.
All marigolds are sunflowers.
Conclusions: **I.** Some sunflowers are jasmines.
II. No marigolds are roses.

26. How Many such pairs of letters are there in the word FUNCTION, each of which have as many letters between them in the word as they have between them in the English alphabet?
(a) None (b) One (c) Two
(d) Three (e) More than three

27. Statement: Reinforcing its commitment to green initiatives, railways will explore its future course of action to prevent pollution. Issues related to environment like solid waste management, pollution control, water management and energy management will be discussed at a workshop on 'Environmental challenges before Indian Railways and solutions'.
Which of the following points will strengthen the decision taken by the Railways?
I. Introduction of bio-fuel and solar energy in train operation.
II. Installation of rain water harvesting facilities at major stations.
III. Waste water recycling plant is also being planned in which recycled water will be used for washing and horticulture purpose.
IV. Initiatives such as LED light fittings to reduce power consumption and use of five percent bio-diesel in diesel locos.
V. Introduction of water audit to assess consumption and wastage at major stations.
(a) All of these (b) All except I
(c) All except I and V (d) All except V
(e) None of these

28. Statement: The government is set to overhaul annual targets for public sector lenders, ending a focus on size that has long encouraged banks to inflate their loans and deposits at the year-end to hit growth objectives. Banking and government sources said that the new targets, to be discussed at meeting with top state bank officials, would focus on efficiency, with objectives set around return on assets, or return on equity, and controlling bad debts.
Which of the following points can be inferred from the given information? (An inference is something that is not directly stated but can be inferred from the given information.)
(a) Loans and deposits of the banks will go up.
(b) Some short-term loans will be discouraged by the banks.
(c) Credit ratings of the banks will be boosted up.
(d) Financial stability of the banks will be lost.
(e) All can be inferred.

29. From word 'OUTSHINE' with the help of 1^{st}, 2^{nd}, 3^{rd}, 5^{th} and 7^{th} letter make meaningful English word and answer that what is the third letter in a new word. If more than one word is possible then give answer Z and if no word is possible then give answer X.
(a) T (b) X (c) U
(d) Z (e) N

30. Out of five persons A, O, M, E and P. M is younger than A and O but older than E. A is older than O and E. P is not the youngest. Then which person is the Youngest?
(a) O (b) E (c) P
(d) A (e) None of these

Directions (31-35): Study the following information carefully to answer the given questions
Seven persons A, B, C, D, E, F and G are belongs to three different departments Production, Marketing and HR with at least 2 of them in any of these department. Each of them belongs to different cities i.e. Patna, Chandigarh, Kolkata, Delhi, Jaipur, Ranchi and, Mumbai.
B works in Marketing department with E. E belongs to Mumbai. Those who work in Production department do not belong to Patna and Delhi. The one who belongs to

Chandigarh works only with G in department HR. The one who belongs to Jaipur does not work in the same department with either E or G. A does not works in Marketing department. A belongs to Ranchi. D and F are work in the same department. F does not belong to Kolkata. The one who belongs to Delhi does not work in Marketing department.

31. In which department A, D and F work?
(a) Cannot be determines (b) Production
(c) Marketing (d) HR
(e) None of these

32. Who belongs to Patna?
(a) B (b) A (c) C
(d) D (e) None of these

33. In which of the following city does 'F' belong?
(a) Ranchi (b) Delhi (c) Mumbai
(d) Jaipur (e) None of these

34. Which of the following combination is right?
(a) A – HR : Chandigarh
(b) G – Production: Jaipur
(c) F – HR : Delhi
(d) D – Production: Kolkata
(e) None of these

35. C works in which department?
(a) Production (b) Marketing
(c) HR (d) Cannot be determined
(e) None of these

Directions (36-40): Study the given information carefully to answer the given question.
A, B, C, D, E, F and G are seven cars which are running on tracks and travelling and covering different distance but not necessarily in the same order. Each car has different colours i.e. Red, Orange, Green, Black, Yellow, White and Blue but not necessarily in the same order.

Car A is in odd number ranking and is not 3rd lowest in covering distance. Car which is of yellow colour is immediate more than in covering distance than Car A. There are only two cars between car A and the one which is of green colour in covering distance. The Car which is of orange colour is in odd number ranking but greater than Car D in travelling. D is covering third lowest distance. Third lowest car in travelling covers a distance of 1218 km. Only three cars are between car C and the one which is of orange colour. The one which is of green colour is immediate more than in covering distance than car C. E covers a distance of 1456 km. The car which is of red colour is immediate more than in covering distance than car which is of blue colour. Car G is in odd number ranking. Only one car is in between car B and E. Car B covers more distance than car E. Neither car C nor A is of black colour. Car E is not of green colour.

36. Car A is of which colour?
(a) White (b) Blue (c) Green
(d) Orange (e) Red

37. Which of the following combinations is true with respect to the given arrangement?
(a) White–C (b) Orange – F (c) Blue - G
(d) Yellow - D (e) Black–B

38. Which car is second highest in covering distance?
(a) B (b) Car which is of red colour
(c) Car which is of blue colour
(d) D (e) F

39. If B+E cover a distance of 3216km, then what is the possible score of A?
(a) More than G. (b) 1520 km
(c) 1368 km (d) Less than 1456km
(e) None of these

40. What is the colour of Car F?
(a) White (b) Blue (c) Green
(d) Orange (e) Red

QUANTITATIVE APTITUDE

41. In a mixture of 40 litre, the ratio of milk and water is 4 : 1. If some quantity of mixture taken out and then 4 litre of milk and 4 litre of water is added to the mixture then the ratio of milk and water become 8 : 3. Find the quantity of mixture which was taken out initially ?
(a) 10 litre (b) 15 litre (c) 12 litre
(d) 18 litre (e) None of these

42. If the present age of A is twice the present age of B. 18 years ago age of C is half the age of B six years hence. If the average of the present age of A, B and C is 42 years. Find the age of A, 9 years hence?
(a) 69 years (b) 70 years (c) 73 years
(d) 77 years (e) None of these

43. A boat takes 6 min more to cover 21 km downstream when the river flowing at the speed of x km/hr then the time taken to cover the same distance downstream when the river flowing at the rate of $(x + 1)$ km/hr. find the value of x if the speed of boat in still water is 12 km/hr ?
(a) 1.5 (b) 2 (c) 2.5
(d) 1 (e) 3

44. There are 36 tickets numbered from 1 to 36. If two tickets are drawn at random without replacement one by one than find the probability that both tickets have a number which is multiple of 5 ?
(a) $\frac{1}{40}$ (b) $\frac{1}{48}$ (c) $\frac{1}{28}$
(d) $\frac{1}{30}$ (e) None of these

45. A certain sum was put on simple interest at 20% per annum for 2 years. Then the amount received after 2 years put on compound interest 12% per annum for 2 more years. If the amount received at the end of 4 years is 43904 Rs. Then find the amount invested at starting?
(a) 20,000 Rs. (b) 25,000 Rs.
(c) 30,000 Rs. (d) 40,000 Rs.
(e) None of these

Directions (46 – 50): The following table shows the no. of books published and percentage of book distributed among them for 2 companies A and B in different months.

	Books published by company A	% distributed	Books published by Company B	% distributed
Jan	450	32%	—	44%
March	260	45%	250	24%
May	—	38%	—	60%
July	560	—	792	25%
Sep	220	35%	350	—

46. If total no. of books published in May by both companies are 1625, while total books distributed by both are 766, then find difference between no. of books published by company A and Company B in may.
(a)250 (b) 275 (c) 225
(d) 300 (e) None of these

47. The no. of Books distributed by company A in January are approximately what percent of no. of books distributed by company B in July?
(a)65% (b) 70% (c) 75%
(d) 73% (e) 80%

48. If book distributed by company B in January are 2 less than double of books distributed by company A in the same month. Then find the total no. of books published by company B in January.
(a)625 (b) 650 (c) 600
(d) 700 (e) None of these

49. If no. of books distributed by company B in November are $14\frac{2}{7}$% less than book distributed by same company in September, while total books published in November are 400, then what percent of books published in November by company B are distributed?
(a)25.5% (b) 26.5% (c) 27.5%
(d) data inadequate (e) None of these

50. Find the total no. of books distributed in March by both companies together?
(a) 157 (b) 187 (c) 167
(d) 177 (e) None of these

Directions (51-55): In each of these questions a number series is given. In each series only one number is wrong. Find out the wrong number.

51. 4, 10, 23, 43, 70, 108, 145
(a) 10 (b) 145 (c) 43
(d) 70 (e) 108

52. 8, 5, 7, 10, 21, 53.5, 161.50
(a) 5 (b) 10 (c) 7
(d) 21 (e) 53.5

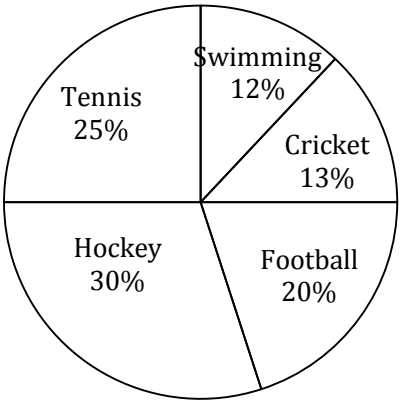
53. 5, 8, 13, 40, 161, 806, 4837
(a) 161 (b) 40 (c) 13
(d) 8 (e) 806

54. 6, 14, 78, 294, 842, 1806, 3534
(a) 294 (b) 842 (c) 78
(d) 14 (e) 3534

55. 3, 4, 6, 24, 192, 3072
(a) 4 (b) 6 (c) 192
(d) 24 (e) 3072

Directions (56-60): Given below is the pie chart showing the distribution of no. of students of a school who are involved in 5 different games. The table shows the ratio of boys to girls among them. Study them carefully and answer the following questions.

Total no. of students = 1800



Game	Boys : Girls
Football	5 : 4
Hockey	7 : 3
Tennis	2 : 3
Swimming	3 : 5
Cricket	2 : 1

56. The number of girls in swimming are what percent of the number of girls in Tennis ?
(a) 45% (b) 60% (c) 65%
(d) 50% (e) None of these

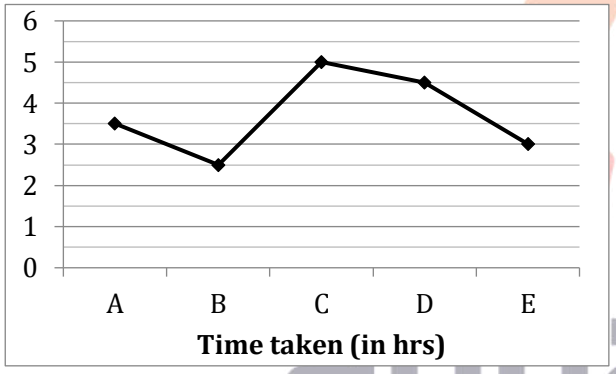
57. What is the sum of the number of boys in cricket and number of boys in Hockey ?
(a) 534 (b) 532 (c) 525
(d) 540 (e) None of these

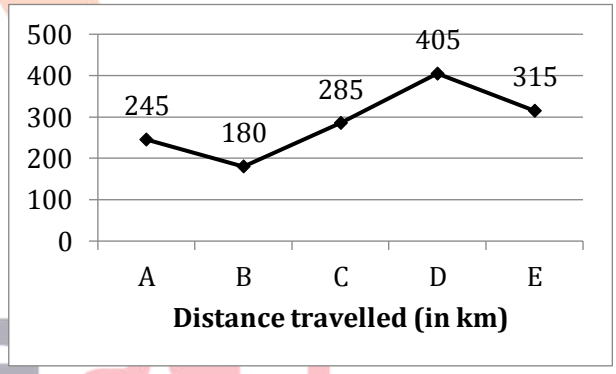
58. What is the ratio of number of boys in football to number of girls in Tennis and swimming together?
(a) 50 : 81 (b) 45 : 79 (c) 40 : 83
(d) 40 : 81 (e) None of these

59. Total no. of girls in all 5 games together is approximately what percent of the total number of students ?
(a) 48% (b) 40% (c) 45%
(d) 35% (e) 55%

60. Find the different between number of boys in Swimming to that in Football.
(a) 144 (b) 124 (c) 114
(d) 122 (e) None of these

Directions (61-65): The first line graph shows the total distance travelled by 5 different trains on Monday, while the second graph shows the corresponding time taken to cover that distance.





61. If the average of the speed of train A on Monday and Tuesday is 75 km/hr, while the time of travelling is same on both the days, then find the total distance travelled by train A on Tuesday.
(a) 290 km (b) 240 km (c) 280 km
(d) 250 km (e) None of these

62. What is the ratio of speed of train B to speed of train D on Monday ?
(a) 4 : 5 (b) 3 : 4 (c) 2 : 3
(d) 3 : 5 (e) None of these

63. The speed of the slowest train is approximately what percent of the speed of fastest train on monday?
(a) 48% (b) 54% (c) 60%
(d) 64% (e) 70%

64. If the speed of train B is decreased by 25% on Tuesday, and of train A increases by 20% on Tuesday. Then speed of train B on Tuesday approximately what percent of speed of train A on Tuesday ?
(a) 62% (b) 64% (c) 68%
(d) 66% (e) 70%

65. If distance travelled by train D is increased by $11\frac{1}{9}\%$ on Tuesday, while the time of travelling of train D on Tuesday is 4 hrs, then find the speed of train D on Tuesday.
(a) 72 km/hr (b) 90 km/hr
(c) 112.5 km/hr (d) 100 km/hr
(e) None of these

66. A man bought a mobile and a laptop for Rs. 78000. He sold the mobile at a gain of 25% and the laptop at a loss of 15%, thereby gaining 5% on the whole. Find the cost price of mobile.
(a) Rs. 39000 (b) Rs. 34000
(c) Rs. 30000 (d) Rs. 38000
(e) Rs. 32000

67. A and B started a business with the investments in the ratio of 5 : 3 respectively. After 6 months from the start of the business, C joined them and the respective ratio between the investments of B and C was 2 : 3. If the annual profit earned by them was Rs. 12300, what was the difference between B's share and C's share in the profit ?
(a) Rs. 900 (b) Rs. 800 (c) Rs. 600
(d) Rs. 400 (e) Rs. 700

68. A group of 30 men, working 4 hours a day can do a piece of work in 10 days. Find the number of days in which another group of 45 men working 8 hrs a day can do twice the work. Assume that 2 men of the first group do as much work in 2 hours as 4 men of the second group do in 1 hr.
(a) $6\frac{1}{3}$ days (b) $6\frac{2}{3}$ days (c) $5\frac{5}{6}$ days
(d) $3\frac{1}{6}$ days (e) None of these

69. Manish borrowed some money at the rate of 7 per cent per annum for the first three years, 9 per cent per annum for the next six years and 10 per cent per annum for the period beyond nine years. If the total interest paid by him at the end of fifteen years is Rs 4050, how much money did he borrow?(if simple interest be reckoned)
(a) Rs 2800 (b) Rs 3600 (c) Rs 3000
(d) Rs 3500 (e) None of these

70. The average marks of 100 students were found to be 40. Later on it was discovered that a score of 53 was misread as 83. Found the correct average corresponding to the correct score.
(a) 38.7 (b) 39 (c) 39.7
(d) 41 (e) None of these

71. A circus tent is cylindrical up to a height of 3 m and conical above it. If its diameter is 105m and the slant height of the conical part is 63 m, then the total area of the canvas required to make the tent is (take $\pi = \frac{2}{7}$)
(a) 11385 m^2 (b) 10395 m^2 (c) 9900 m^2
(d) 990 m^2 (e) None of these

72. A man buys pulse for Rs. 4800. He sells $\frac{2}{5}$th of it at a profit of 25%. At what per cent gain should he sell remaining $\frac{3}{5}$th so as to make an overall profit of 19% on the whole transaction?
(a) 15% (b) 18% (c) 21%
(d) 12% (e) none of these

73. The different between the simple and the compound interest compounded every six months at the rate of 10 per cent per annum at the end of two years is Rs. 124.05. What is the sum?
(a) Rs. 10000 (b) Rs. 60000
(c) Rs. 12000 (d) Rs. 8000
(e) None of these

74. The ratio of the quantities of sugar, in which sugar costing Rs. 20 per kg. and Rs. 15 per kg. should be mixed so that here will be neither loss nor gain on selling the mixed sugar at the rate of Rs. 16 per kg.
(a) 2 : 1 (b) 1 : 2 (c) 4 : 1
(d) 1 : 4 (e) None of these

75. If the numerator of a fraction is increased by 20% and the denominator is increased by 25%, the fraction obtained is $\frac{3}{5}$. What was the original fraction?
(a) $\frac{5}{7}$ (b) $\frac{4}{7}$ (c) $\frac{3}{8}$
(d) Can't be determined (e) None of these

Directions (76-80): Equation number I and II are given. You have to solve both the questions and answer.

76. **I.** $3x^2 + 29x + 56 = 0$
II. $2y^2 + 15y + 25 = 0$
(a) x < y (b) x > y (c) x ≥ y
(d) x ≤ y
(e) Relationship between x and y cannot be established

77. **I.** $4x^2 - 29x + 45 = 0$
II. $3y^2 - 19y + 28 = 0$
(a) x < y (b) x > y (c) x ≥ y
(d) x ≤ y
(e) Relationship between x and y cannot be established

78. **I.** $3x^2 - 13x + 12 = 0$
II. $3y^2 - 7y + 2 = 0$
(a) $x > y$ (b) $x < y$ (c) $x \geq y$
(d) Relationship between x and y cannot be established
(e) $x \leq y$

79. **I.** $20x^2 - 9x + 1 = 0$
II. $12y^2 - 7y + 1 = 0$
(a) $x \geq y$ (b) $x \leq y$ (c) $x > y$
(d) Relationship between x and y cannot be established
(e) $x < y$

80. **I.** $x^2 = 16$
II. $2y^2 - 17y + 36 = 0$
(a) x > y (b) x ≥ y (c) x < y
(d) Relationship between x and y cannot be established
(e) x ≤ y

ENGLISH LANGUAGE

Directions (81-90): Read the following passage carefully and answer the questions given below it. Certain words are given in bold to help you locate them while answering some of the questions.

The Indian Space Research Organisation has crossed a significant milestone with the successful developmental flight of the country's heaviest Geosynchronous Satellite Launch Vehicle, the GSLV Mark-III. This is the first time a satellite weighing over 3.1 tonnes has been launched from India to reach the geostationary orbit about 36,000 km from Earth. The Mk-III can launch satellites weighing up to four tonnes, which almost doubles India's current launch capacity. With communication satellites becoming heavier (up to six tonnes), the capability for larger payloads is vital. This can be done by switching over to electric **propulsion** for orbit rising and to keep the satellite in the right position and orientation in the orbit through its lifetime (that is, station keeping). The switch-over would reduce the weight of the vehicle as it can do away with nearly two tonnes of **propellants** and carry heavier satellites. Towards this end, ISRO has started testing electric propulsion in a small way; the South Asia Satellite (GSAT-9) that was launched last month used electric propulsion for station keeping. On Monday, an indigenously developed lithium-ion battery was used for the first time to power the satellite. Another key achievement is the use of an indigenously developed cryogenic stage, which uses liquid oxygen and liquid hydrogen; the 2010 GSLV launch using an indigenous cryogenic stage ended in failure. It can now be said without hesitation that India belongs to the **elite** club of countries that have mastered cryogenic technology. In the December 2014 experimental flight of the GSLV Mk-III, a passive cryogenic stage was used. Though the cryogenic stage was not meant to be ignited, the launch provided invaluable data on aerodynamic behaviour of the vehicle.

The Mark-III will be **operational** with the success of one more developmental flight, which is set to take place within a year. This will make India self-reliant in launching heavier satellites, bringing down costs substantially. Till now, heavier communication satellites have been launched on Europe's Ariane rockets; in fact, ISRO will soon be using Ariane rockets to launch two of its heavier satellites. But as has been the case with lighter satellites, it is likely that other countries will soon turn to ISRO for the launch of heavier satellites at a lower cost. With fewer propulsion stages and, therefore, control systems, the Mk-III is far more reliable than the GSLV and the PSLV. Combined with its ability to carry eight to 10 tonnes into a low Earth orbit, the Mk-III can be considered for human-rating certification (to transport humans) once some design changes are made. Compared with the two-member **crew** capacity of the GSLV, the Mk-III can carry three astronauts and have more space to carry out experiments. The next developmental flight, therefore, will be crucial.

81. Which of the following features make the newly launched vehicle GSLV Mark-III distinctive?
(I) It is the first time that India has launched a satellite weighing over 3.1 tonnes.
(II) The launching capacity of satellites up to four tones almost doubles the current launch capacity of India.
(III) It is the first time that an indigenously developed lithium-ion battery was used to power the satellite.
(a) Only (I) is correct
(b) Only (II) is correct
(c) Both (I) and (II) are correct
(d) Both (II) and (III) are correct
(e) All are correct

82. How, according to the passage, excess load of newly launched satellite vehicle can be mitigated?
(a) By switching over to electric propulsion for orbit-rising and station keeping.
(b) By replacing the heavier equipments by lighter ones.
(c) By using the cryogenic stage which uses liquid oxygen and liquid hydrogen.
(d) By proper studies of aerodynamic behaviour of the vehicle.
(e) Both (a) and (b)

83. Which of the following statements justify the author's view, "This will make India self-reliant in launching heavier satellites"?
(I) The successful launch of the country's heaviest Geosynchronous Satellite Launch Vehicle, the GSLV Mark-III is one of the greatest milestones in the history of ISRO.
(II) ISRO is set to launch yet another developmental flight within a year.
(III) India now belongs to the elite club of countries that have mastered cryogenic technology.
(a) Only (I) is correct
(b) Both (I) and (II) are correct
(c) Both (II) and (III) are correct
(d) Both (I) and (III) are correct
(e) All are correct

84. Which of the following statements is **false** in context of the passage?
(a) The South Asia Satellite (GSAT-9) used electric propulsion for station keeping.
(b) In the December 2014 experimental flight of the GSLV Mk-III, a passive cryogenic stage was used.
(c) ISRO will soon be using Ariane rockets to launch two of its heavier satellites.
(d) The switch-over to electric propulsion would reduce nearly two tonnes of propellants and carry heavier satellites.
(e) All are true.

85. How according to the passage Mk-III is more reliable than the GSLV and the PSLV?
(I) The Mk-III can carry three astronauts as compared to GSLV which has two-member crew capacity.
(II) The Mk-III has fewer propulsion stages and control systems than GSLV and PSLV.
(III) The Mk-III has more space to carry out experiments than GSLV and PSLV.
(IV) The Mk-III costs lighter than GSLV and PSLV in terms total production cost.
(a) Both (I) and (II)
(b) Both (II) and (III)
(c) Only (I), (II) and (IV)
(d) Only (I), (II) and (III)
(e) All (I), (II), (III) and (IV)

Directions (86-88): Choose the word/group of words which is most similar in meaning to the word/group of words printed in bold as used in passage.

86. Propulsion
(a) Plethora (b) Impulse (c) Satiety
(d) Clogging (e) Revulsion

87. Crew
(a) Interior (b) Crowd (c) Oodles
(d) Bevy (e) Laity

88. Propellant
(a) Mulligan (b) Antecedent (c) Mainspring
(d) Motif (e) Ardour

Directions (89-90): Choose the word/group of words which is most opposite in meaning to the word/group of words printed in bold as used in passage.

89. Elite
(a) Patriciate (b) Gentry (c) Dregs
(d) Skim (e) Unusual

90. Operational
(a) Viable (b) Realizable (c) Virtuous
(d) Expedient (e) Severed

Directions (91-95): Read the passage carefully and answer the questions given below it. Certain words/ phrases have been given in bold to help you locate them while answering some of the questions.

Many people believe that Science and Religion are contrary to each other. But this notation is wrong. As a matter of fact, both are complementary to each other. The aim of both these institutions is to explain different aspects of life, universe and human existence. There is no doubt that the method of science and religion are different. The method of science is observation, experimentation and experience. Science takes its recourse to progressive march towards perfection. The tools of religion are faith, institution and spoken word of the enlightened. In general, while science is inclined towards reason and rationality, spiritualism is the essence of religion.

In earlier times when man appeared on earth he was overawed at the sight of violence of powerful aspects of nature. In certain cases, usefulness of different natural objects of nature overwhelmed man. Thus, began the worship of forces of nature fire, the sun, the rivers, the rocks, the trees, the snakes, etc. The holy scriptures were written by those who had developed harmony between external nature and their inner self. Their objective was to ennoble, elevate and liberate the human spirit and mind. But the priestly class took upon itself the monopoly of scriptural knowledge and interpretation to its own advantage. Thus, whole entire human race was in chains. Truth was flouted and progressive liberal and truthful ideas, ideas expressing doubt and scepticism were suppressed and their holders punished. It was in these trying circumstances that the science emerged as a saviour of mankind. But its path was not smooth and safe. The scientists and free thinkers were tortured. This was the fate of Galileo, Copernicus, Bruno and others. But, by and by Science gained ground.

91. Why does man worship the forces of nature?
(a) The holy scriptures advocate the worship of forces of nature.
(b) The worship elevates and liberates the human spirit and mind.
(c) The worship makes man believe in faith and intuition.
(d) Forces of nature teach us spiritualism.
(e) None of these

92. Which of the following statement is TRUE in the context of the passage?
(a) Science and religion are antagonistic to each other.
(b) Science encourages worshipping of the nature.
(c) Religion is essential for external peace and harmony.
(d) Regimental religion was replaced by scientific principles.
(e) Science is essential for inner peace of mind.

93. According to the passage, science and religion both
(a) rely on the spoken word of the enlightened
(b) emerged out of the fear of man
(c) emerged from the desire of man to worship the forces of nature
(d) employ different methods of enquiry
(e) work at the cross-purpose of each other

94. Which of the following statements is NOT TRUE in the context of the passage?
(a) Man worships the forces of nature.
(b) Methods of science and religion are different.
(c) Regimental religion got degenerated into orthodoxy.
(d) Galileo and Bruno were disciples of Copernicus.
(e) The holy scriptures were written by people who had tremendous inner strength.

95. According to the passage, at the present juncture, there is a need to
(a) encourage spiritualism as much as possible
(b) teach people to worship the forces of nature
(c) free man from all sorts of bondages
(d) explain to the people different aspects of life and universe
(e) judiciously mix the principles of science and the spirit of religion

Directions (96-100): Read each sentence to find out whether there is any grammatical or idiomatic error in it. The error, if any, will be in one part of the sentence. The number of that part is the answer. If there is 'No error', the answer is (e). (Ignore errors of punctuation, if any.)

96. Festivals are prime occasions (a)/ for spluring on presents and owing to improved economic situation (b)/ the youths is gung-ho (c)/ about breaking all previous records. (d)/ no error. (e)

97. It is important to recruit personnel at (a)/ different levels in the organization so that (b)/ ensuing human resource gap is bridged (c)/ at least for the critical operations. (d)/ No error. (e)

98. Not only has the commerce ministry fixed (a)/ extraordinarily minimum prices for onion exports (b)/ but it has also made licencesmandatory (c)/ for every consignment. (d)/ No error. (e)

99. Mother tongue is as natural (a)/ for the development of man's mind (b)/ as mother's milk is (c)/ for the development of the infant's body. (d)/ No error. (e)

100. A small piece (a)/ of bread is (b)/ certainly better than (c)/ being nothing to eat. (d)/ No error. (e)

Directions (101 – 105): In each of the following questions given below there are two blanks, each blank indicates that something has been omitted. Choose the set of words for each blank which best fits to the meaning of the sentence as a whole.

101. SEBI's predominant concern, apart from _____ the information available to investors, seems to be to _____ rating agencies from resorting to collusion in reaching decisions.
(a) regulating, delaying
(b) overhauling, circumventing
(c) magnifying, deter
(d) improving, prevent
(e) retrogressing, retard

102. Repeated failures have not _____ the business of rating agencies, primarily due to the lack of alternative service providers who can _____ out investors.
(a) concerned, serve (b) assumed, gratify
(c) pretended, favour (d) affected, help
(e) perturbed, pamper

103. The legislature of Spain's north-eastern region last week passed a law to back the October 1 vote for _____, consistent with the narrow electoral mandate it _____ on a promise of self-determination.
(a) rejection, disbursed
(b) secession, received
(c) repudiation, credited
(d) abrogation, sanctioned
(e) evasion, recognized

104. Global commodities have _____ a bull run over the last 12 months, _____hopes of the beginning of the next supercycle in commodity prices.
(a) insisted, provoking (b) professed, agitating
(c) witnessed, reviving (d) noticed, dissuading
(e) understood, rectifying

105. After 39 _____ successful launches, the Indian Space Research Organisation had almost made it _____ that launching satellites was indeed child's play when it used its workhorse rocket, the Polar Satellite Launch Vehicle.
(a) pertinent, perform (b) infrequent, operate
(c) recurrent, exert (d) coherent, conduct
(e) consecutive, appear

Directions (106-110): Rearrange the following sentences (A), (B), (C), (D), (E) and (F) in the proper sequence to form a meaningful paragraph; then answer the questions given below them.

(A) The Australian this week became the first player ever to be penalized for mock fielding, in a local match.
(B) The batsman was confused for a moment, stopped in his tracks, and then completed the run.
(C) The umpire awarded the batsman five runs for "deliberate distraction, deception or obstruction of a batsman".
(D) Connoisseurs of cricketing trivia would do well to remember the name MarnusLabuschagne.
(E) This trick is a common one in Indian club cricket, especially when there is overgrown grass in the monsoon.
(F) Labuschagne dived to stop a cover drive that went past him, quickly got up and pretended to throw the ball that he did not actually have in his hands.

106. Which of the following should be the **first** sentence after rearrangement?
(a) B (b) D (c) A
(d) F (e) C

107. Which of the following should be the **third** sentence after rearrangement?
(a) A (b) D (c) F
(d) E (e) C

108. Which of the following should be the **fourth** sentence after rearrangement?
(a) B (b) E (c) F
(d) C (e) D

109. Which of the following should be the **last** sentence after rearrangement?
(a) D (b) E (c) A
(d) B (e) C

110. Which of the following should be the **second** sentence after rearrangement?
(a) C (b) A (c) B
(d) D (e) E

Directions (111-120): In the following passage, some of the words have been left out, each of which is indicated by a number. Find the suitable word from the options given against each number and fill up the blanks with appropriate words to make the paragraph meaningfully complete.
In the __(**111**)__ of stakeholders at the local body level, recoverable resources __(**112**)__ in discarded materials are lost due to dumping. Organic refuse, which __(**113**)__ about 50% of all garbage, readily lends itself to the __(**114**)__ of compost or production of methane for household use or power generation. But it is a major opportunity __(**115**)__. Organic waste that could help green cities and __(**116**)__ small and affordable household biogas plants is simply being thrown away. It is also ironic that while some countries such as Rwanda and Kenya have introduced stiff penalties for the __(**117**)__ of flimsy plastic bags, India is doing little to __(**118**)__ them from drifting into suburban garbage mountains, rivers, lakes and the sea, and being __(**119**)__ by cattle feeding on dumped __(1**20**)__.

111. (a) sparsity (b) desertion (c) poverty
(d) absence (e) paucity

112. (a) settled (b) equipped
(c) surrounded (d) confined
(e) embedded

113. (a) supplies (b) forms (c) classifies
(d) demands (e) extends

114. (a) manufacture (b) accumulation
(c) generation (d) foundation
(e) conception

115. (a) awed (b) misled (c) lost
(d) absorbed (e) rapt

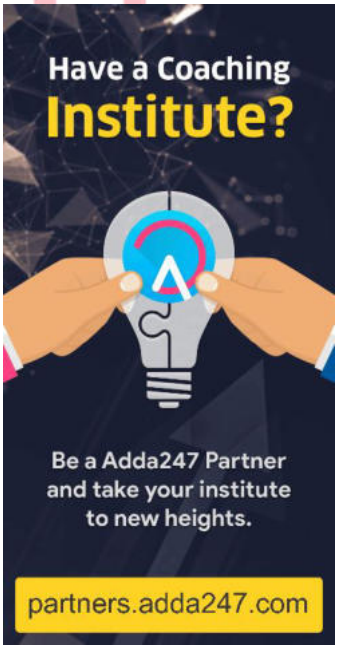
116. (a) feed (b) deliver (c) nurture
(d) provide (e) produce

117. (a) interest (b) favor (c) gain
(d) selection (e) use

118. (a) reduce (b) discourage (c) prevent
(d) facilitate (e) reject

119. (a) absorbed (b) grazed (c) ravaged
(d) ingested (e) grasped

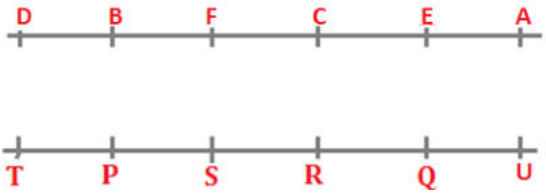
120. (a) limit (b) refuse (c) exclude
(d) evade (e) cease



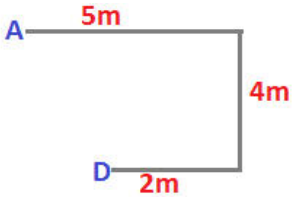
Solutions

REASONING ABILITY

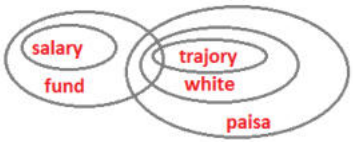
Directions (1-5):



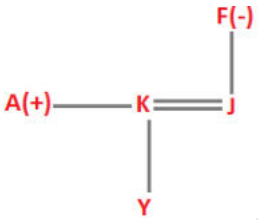
1. (b); 2. (e); 3. (a);
4. (b); 5. (b);
6. (b);



7. (d);

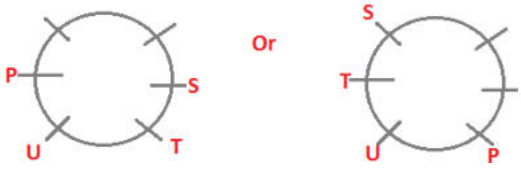


8. (c);



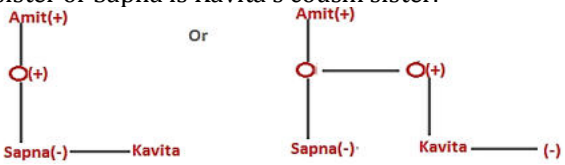
9. (a); All that the speaker implies is that Kapil is efficient because he has twelve years of practice, and so option (a) is correct. (b) is eliminated because the word 'identical' is not mentioned in the paragraph. (c) is eliminated because we are talking about typing not the whole 'job profile'. (d) is eliminated as nothing is mentioned about Kapil's speed and accuracy and we cannot assume efficiency as speed and accuracy. Similarly (e) cannot be the answer as nothing is implied about fitting into the office.

10. (d); From Statement I and II- We cannot say that who among the following sits on the immediate right of T as there are two possibilities that either S or U sits on the immediate right of T.



11. (b); From Statement II- it is clear that the code for 'Book' is "mik".

12. (d); From Statement I and II- We can clearly say that there is two possible case that either Sapna is Kavita's sister or Sapna is Kavita's cousin sister.



13. (d); From Statement I, we can say that Pooja's birthday is either in the month of July or in August.

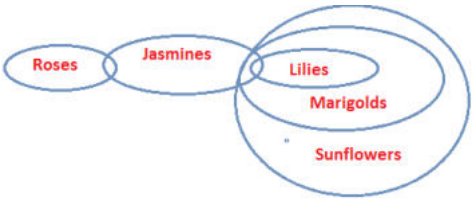
14. (e); From Statement I and II- we can clearly say that Sohan's rank is fourth from the bottom or ninth from the top.

15. (e); Since, nothing is being mentioned in the paragraph about the employees leaving their jobs or company announcing pay hikes next year. SO, neither of the two statements are implicit.

Direction (16-20):

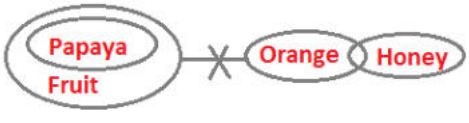
Boxes	Articles
T	16
P	2
V	6
S	20
Q	9
R	15
U	11

16. (b); 17. (c); 18. (a);
19. (b); 20. (e);
21. (c);



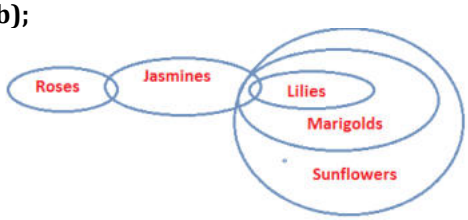
22. (e);

23. (c);



24. (b);

25. (b);



26. (c); There are only two letters in the given word in which have as many letters between them in the word as they have between them in the English alphabet.

F U N C T I O N
6 21 14 3 20 9 15 14

27. (d); All the points in the options promote green initiatives except auditing of water consumption as it is an examination of system records and equipment that may be used to identify, quantify and verify how much water passes through the system and where it goes.

28. (b); 'Short-term loans' refer to the loans scheduled to be repaid in less than a year. When your business does not qualify for a line of credit from a bank, you might still have success in obtaining money from them in the form of a one-time, short-term loan (less than a year) to finance your temporary working capital needs.

29. (b); The 1^{st}, 2^{nd}, 3^{rd} , 5^{th} and 7^{th} letter of the word 'OUTSHINE' are O, U, T, H and N. Using these letter no meaningful word can be possible.

30. (b); From the above given statements, we can clearly say the E is the youngest among all.

Directions (31-35):

Persons	Department	City
A	Production	Ranchi
B	Marketing	Patna
C	HR	Chandigarh
D	Production	Kolkata
E	Marketing	Mumbai
F	Production	Jaipur
G	HR	Delhi

31. (b); **32. (a);** **33. (d);**
34. (d); **35. (c);**

Directions (36-40):

G(Black) > B(Yellow) > A(Orange) > E(Red) > D(Blue) > F(Green) > C(White)

36. (d); **37. (a);** **38. (a);**
39. (b); **40. (c);**

QUANTITATIVE APTITUDE

41. (b); Milk $\rightarrow \frac{4}{5} \times 40 = 32$ litre

Water $\rightarrow \frac{1}{5} \times 40 = 8$ litre

Let x liters mixture take out

$\therefore \frac{32-\frac{4}{5}\times x+4}{8-\frac{1}{5}\times x+4} = \frac{8}{3}$

$540 - 12x = 480 - 8x$

$4x = 60$

$x = 15$ litres.

42. (a); A → 2x years

B → x years

$(C - 18) = \frac{1}{2}(x + 6)$

$C = \frac{x}{2} + 21$

Given $\frac{(A+B+C)}{3} = 42$

$2x + x + \frac{x}{2} + 21 = 42 \times 3$

$\frac{4x+2x+x}{2} = 105$

$x = 15 \times 2 = 30$ years

Required age $= 2x + 9 = 30 \times 2 + 9 = 69$ years

43. (b); $\frac{21}{x+12} - \frac{21}{x+13} = \frac{6}{60}$

$x^2 + 25 - 54 = 0$

$x = -27, +2$

Required speed = 2 km/hours

44. (d); $\therefore$ Required probability $= \frac{7}{36} \times \frac{6}{35} = \frac{1}{30}$

45. (b); Let amount = 1000 Rs.

After 2 years, amount = 1.4 × 1000

= 1400 Rs.

Further after two years, amount

$= 1400\left(1 + \frac{12}{100}\right)^2 = 1756.16$

$\therefore 1756.16 \rightarrow 43904$ Rs.

$1 \rightarrow \frac{43904}{1756.16} = 25$

$\therefore$ Required amount = 1000 × 25 = 25000 Rs.

46. (b); $x \times 0.38 + (1625 - x) \times 0.60 = 766$

$x = 950$

$1625 - x = 675$

required difference $= 950 - 675 = 275$

47. (d); Required percentage $= \frac{144}{198} \times 100 \approx 73\%$

48. (b); book distributed by company B
$= 2 \times \left[450 \times \frac{32}{100}\right] - 2 = 286$
books published by company B $= 286 \times \frac{100}{44} = 650$

49. (d); Since data is not sufficient to calculate the required value.

50. (d); $260 \times \frac{45}{100} + 250 \times \frac{24}{100} = 177$

51. (e);
$4 \underset{6}{__} 10 \underset{13}{__} 23 \underset{20}{__} 43 \underset{27}{__} 70 \underset{34}{__} 104 \underset{41}{__} 145$
$\therefore 70 + 34 \Rightarrow 104$ not 108

52. (c); $\times 0.5 + 1, \times 1 + 1, \times 1.5 + 1, \times 2 + 1, \times 2.5 + 1 \ldots\ldots$
$\therefore 5 \times 1 + 1 = 6$ not 7

53. (d); $\times 1 + 1, \times 2 + 1, \times 3 + 3, \times 4 + 1, \times 5 + 1 \ldots\ldots\ldots$
$\therefore 5 \times 1 + 1 = 6$ not 8

54. (b); $+2^3, +4^3, +6^3, +8^3, +10^3 \ldots\ldots\ldots$
$\therefore 294 + 512 = 806$ not 842

55. (a); $\times 1, \times 2, \times 4, \times 8, \times 16$
$\therefore 3 \times 1 = 3$ not 4

56. (d); Girls in Swimming $= \frac{5}{8} \times \frac{12}{100} \times 1800 = 135$
Girls in tennis $= \frac{3}{5} \times \frac{25}{100} \times 1800 = 270$
Required percentage $= \frac{135}{270} \times 100 = 50\%$

57. (a); No. of boys in cricket $= \frac{2}{3} \times \frac{13}{100} \times 1800 = 156$
No. of boys in Hockey $= \frac{7}{10} \times \frac{30}{100} \times 1800 = 378$
$156 + 378 = 534$

58. (d); Required ratio $= \frac{200}{270+135} = \frac{200}{405} = 40 : 81$

59. (c); Required percentage
$= \frac{160+162+270+135+78}{1800} \times 100 \approx 45\%$

60. (e); Required difference $= 200 - 81 = 119$

61. (c); Speed on Monday $= \frac{245}{3.5} = 70$ km/hr
Speed on Tuesday $= (75 \times 2) - 70 = 80$ km/hr
Distance travelled on Tuesday $= 80 \times 3.5 = 280$ km

62. (a); Required average $= \frac{\frac{180}{2.5}}{\frac{405}{4.5}} = 4 : 5$

63. (b); Required percentage $= \frac{57}{105} \times 100 \approx 54\%$

64. (b); Required percentage $= \frac{54}{84} \times 100 \approx 64\%$

65. (c); Distance travelled on Tuesday
$= 405 \times \frac{10}{9} = 450$ km
Speed $= \frac{450}{4} = 112.5$ km/hr

66. (a); C. P of mobile = x
C. P of laptop = 78000−x
$\frac{25}{100}x - \frac{15}{100}(78000 - x) = \frac{5}{100} \times 78000 \Rightarrow x = 39000$

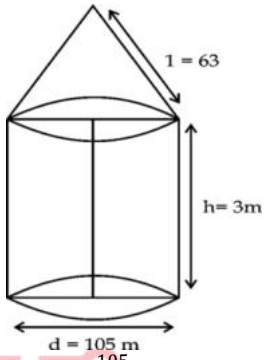
67. (a); A : B = 5 : 3 = 10 : 6
B : C = 2 : 3 = 6 : 9
A : B : C = 10 : 6 : 9
Ratio for profit
$= (10x \times 12) : (6x \times 12) : (9x \times 6) = 20 : 12 : 9$
Required difference $= \frac{12-9}{41} = 12300 = 900$ Rs.

68. (b); let t = days taken by second group
$2 \times 30 \times 4 \times 10 = 45 \times 8 \times t$
$t = 6\frac{2}{3}$ days.

69. (c); Let the borrowed sum is S
$\frac{S \times 7 \times 3}{100} + \frac{S \times 9 \times 6}{100} + \frac{S \times 10 \times 6}{100} = 4050$
$0.21S + 0.54S + 0.6S = 4050$
$1.35S = 4050$
$S = \frac{4050}{1.35} = 3000$ Rs.

70. (c); Average of 100 students = 40
Total = $40 \times 100 = 4000$
Error = 83 – 53 = 30 (high)
So correct average $\Rightarrow \frac{3970}{100} = 39.7$

71. (a);

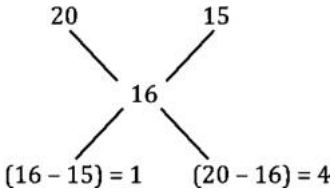


$\therefore$ radius of cone $= \frac{105}{2}$ m
Slant height of cone = 63 m
$\Rightarrow$ curved surface area of cone = (πrl)
$= \frac{22}{7} \times \frac{105}{2} \times 63 = 10395$ m^2
radius of cylinder $= \frac{105}{2}$ m
height = 3 m (given)
$\therefore$ curved surface are of cylinder = $2\pi rh$
$= 2 \times \frac{22}{7} \times \frac{105}{2} \times 3 = 990$ m^2
Total curved area of structure
$\Rightarrow$ Curved area of cone + curved area of cylinder = 10395 + 990
$= 11385$ m^2
$\therefore$ Total area of canvas = 11385 m^2

72. (a); Let total unit = 50
$20 \times \frac{1}{4} + 30 \times \frac{x}{100} = 9.5$
$\frac{3x}{10} = 4.5 \Rightarrow x = 15\%$

73. (d); Let the sum be Rs. x.
Then, $\left[x\left(1 + \frac{5}{100}\right)^4 - x\right] - \left[\frac{x \times 10 \times 2}{100}\right] = 124.05$
Solving the above equation, we get x = Rs. 8000.

74. (d);



Required Ratio = 1 : 4

75. (e); Let original fraction $= \frac{x}{y}$

$\frac{120x}{125y} = \frac{3}{5} \Rightarrow \frac{40x}{25y} = 1 \Rightarrow \frac{x}{y} = \frac{5}{8}$

76. (e); (i) $3x^2 + 29x + 56 = 0$

$3x^2 + 20x + 9x + 56 = 0$

$x = \frac{-8}{3}, -7$

(ii) $2y^2 + 15y + 25 = 0$

$2y^2 + 10y + 5y + 25 = 0$

$y = \frac{-5}{2}, -5$

∴ No relation

77. (e); (i) $4x^2 - 29x + 45 = 0$

$4x^2 - 20x - 9x + 45 = 0$

$x = \frac{9}{4}, 5$

(ii) $3y^2 - 19y + 28 = 0$

$3y^2 - 12y - 7y + 28 = 0$

$y = \frac{7}{3}, 4$

∴ No relation

78. (d); (i) $3x^2 - 13x + 12 = 0$

$3x^2 - 9x - 4x + 12 = 0$

$x = \frac{4}{3}, 3$

(ii) $3y^2 - 7y + 2 = 0$

$3y^2 - 6y - y + 2 = 0$

$y = \frac{1}{3}, 2$

∴ No relation

79. (b); (i) $20x^2 - 9x + 1 = 0$

$20x^2 - 4x - 5x + 1 = 0$

$x = \frac{1}{4}, \frac{1}{5}$

(ii) $12y^2 - 7y + 1 = 0$

$12y^2 - 3y - 4y + 1 = 0$

$y = \frac{1}{3}, \frac{1}{4}$

∴ $x \leq y$

80. (e); (i) $x = \pm 4$

(ii) $2y^2 - 17y + 36 = 0$

$2y^2 - 9y - 8y + 36 = 0$

$y = \frac{9}{2}, 4$

∴ $x \leq y$

ENGLISH LANGUAGE

81. (e); Read the first paragraph carefully, "This is the first time a satellite weighing over 3.1 tonnes has been launched from India to reach the geostationary orbit about 36,000 km from Earth. The Mk-III can launch satellites weighing up to four tonnes, which almost doubles India's current launch capacity." and "On Monday, an indigenously developed lithium-ion battery was used for the first time to power the satellite." Hence all three given features make the newly launched vehicle GSLV Mk-III unique.

82. (a); Refer the first paragraph, "This can be done by switching over to electric propulsion for orbit rising and to keep the satellite in the right position and orientation in the orbit through its lifetime (that is, station keeping). The switch-over would reduce the weight of the vehicle as it can do away with nearly two tonnes of propellants and carry heavier satellites." Hence (a) is the correct option in context of the passage.

83. (e); Read the passage carefully. Refer "It can now be said without hesitation that India belongs to the elite club of countries that have mastered cryogenic technology." and, "The Mark-III will be operational with the success of one more developmental flight, which is set to take place within a year. This will make India self-reliant in launching heavier satellites, bringing down costs substantially." Hence all three statements justify the author's view regarding the development of ISRO.

84. (e); All the given statements are true in context of the passage.

85. (d); Refer the last paragraph, "With fewer propulsion stages and, therefore, control systems, the Mk-III ……..the Mk-III can carry three astronauts and have more space to carry out experiments." Hence only statements (I), (II) and (III) are correct in context of the passage.

86. (b); **Propulsion** means the action of driving or pushing forwards. Hence '**impulse'** is the word most similar in meaning to it.

Satiety means the feeling or state of being sated.
Revulsion means a sense of disgust and loathing.

87. (d); **Crew** means a group of people who work on and operate a ship, aircraft etc. **Bevy** means a large group of people or things of a particular kind. Hence both are similar in meanings.

Oodles mean a very great number or amount of something.
Laity means ordinary people, as distinct from professionals or experts.

88. (a); **Propellant** means a substance used as a reagent in a rocket engine to provide thrust. **Mulligan** means something that blows up. Hence both are similar in meanings.
Motif means a dominant or recurring idea in an artistic work.
Ardour means great enthusiasm or passion.

89. (c); **Elite** means a select group that is superior in terms of ability or qualities to the rest of a group or society. **Dregs** mean the most worthless part or parts of something. Hence both are opposite in meanings.
Patriciate means a noble order or class.
Gentry mean people of good social position, specifically the class of people next below the nobility in position and birth.

90. (e); **Operational** means in or ready for use. **Severed** means put an end to (a connection or relationship); break off. Hence both are opposite in meanings.
Expedient means (of an action) convenient and practical although possibly improper or immoral.

91. (e); Refer the first and second paragraph of the second paragraph "In earlier times when man appeared on earth he was overawed at the sight of violence of powerful aspects of nature. In certain cases, usefulness of different natural objects of nature overwhelmed man."

92. (d); Refer the fifth last sentence of the passage "It was in these trying circumstances that the science emerged as a saviour of mankind."

93. (d); Refer the second and third last sentences of the first paragraph "Science takes its recourse to progressive march towards perfection. The tools of religion are faith, institution and spoken word of the enlightened."

94. (d); Sentence (d) is not correct as it has not been mentioned in the passage.

95. (e); Refer the last paragraph of the passage.

96. (c); Use 'are' in place of 'is' because the subject of the verb 'the youths' is plural.

97. (e); The sentence is grammatically correct.

98. (b); Use 'price' in place of 'prices' as 'onion' is a thing, for which 'price' in singular form is used.

99. (e); The sentence is grammatically correct.

100. (d); The use of 'being' is superfluous.

101. (d); "**improving**, **prevent**" is the correct set of words that makes the sentence meaningful.
Overhauling means take apart (a piece of machinery or equipment) in order to examine it and repair it if necessary.
Circumventing means avoid.
Retrogressing means go back to an earlier state.
Deter means go back to an earlier state.

102. (d); "**affected**, **help**" is the correct set of words that makes the sentence meaningful.
Perturbed means anxious.
Pamper means indulge with every attention, comfort, and kindness

103. (b); "**secession**, **received**" is the correct set of words that makes the sentence meani` `ngful.
Secession means the action of withdrawing formally from membership of a federation or body, especially a political state.
Repudiation means rejection of a proposal or idea.
Disbursed means pay out (money from a fund).

104. (c); "**witnessed**, **reviving**" is the correct set of words that makes the sentence meaningful.
Dissuading means persuade (someone) not to take a particular course of action.
Professed means of a quality, feeling, or belief) claimed openly but often falsely.

105. (e); "**consecutive**, **appear**" is the correct set of words that makes the sentence meaningful.
Pertinent means relevant or applicable to a particular matter, apposite.
Coherent means logical and consistent.

106. (b); The sequence after rearrangement of the sentences is DAFBEC

107. (c); The sequence after rearrangement of the sentences is DAFBEC

108. (a); The sequence after rearrangement of the sentences is DAFBEC

109. (e); The sequence after rearrangement of the sentences is DAFBEC

110. (b); The sequence after rearrangement of the sentences is DAFBEC

111. (d); '**absence'** is the correct word.
Desertion means abandonment, leaving.
Paucity means the presence of something in only small or insufficient quantities or amounts.
Sparsity means to scatter or spread.

112. (e); '**embedded'** is the correct word to be filled in the blank.
According to the theme of the paragraph, 'embedded' is the correct word.

113. (b); '**forms'** is the correct word.

114. (c); '**generation'** is the correct word.
As production is used in the sentence, hence we can get the idea that generation will be the answer.

115. (c); '**lost'** is the correct word.
Awed means filled with awe or wonder.
Misled means cause (someone) to have a wrong idea or impression.
Rapt means completely fascinated or absorbed by what one is seeing or hearing.

116. (a); '**feed'** is the correct word to be filled in the blank.
Organic wastes are useful for the use of small and affordable households.

117. (e); '**use'** is the correct word.

118. (c); "**prevent"** is the correct word.

119. (d); '**ingested'** is the correct word to be filled in the blank.
Ravaged means severely damaged.

120. (b); '**refuse'** is the correct word.
As refuse is also used elsewhere in the paragraph, we can get a hint.

Mock 39

IBPS RRB Clerk Prelims 2019

REASONING ABILITY

Directions (1-4): In each of the question, relationships between some elements are shown in the statements. These statements are followed by conclusions numbered I and II. Read the statements and give the answer.
(a) If only conclusion I follows.
(b) If only conclusion II follows.
(c) If either conclusion I or II follows.
(d) If neither conclusion I nor II follows.
(e) If both conclusions I and II follow.

1. Statements: P < R ≤ M = L > O ≤ V > Y
Conclusions: I. L > P **II.** O > R

2. Statements: A ≥ B > D = F < E ≤ C
Conclusions: I. B > E **II.** D < C

3. Statements: A = E ≥ D ≥ C < F ≤ B
Conclusions: I. C < A **II.** A = C

4. Statements: F ≥ N = O > P ≤ K > T
Conclusions: I. K < F **II.** N < K

Direction (5-9): Study the following information carefully and answer the question given below-

Seven people viz. A, B, C, D, E, F and G lives in a building on seven different floors such as ground floor is numbered 1, the floor just above is numbered 2 and so on till top floor numbered as seven but not necessarily in the same order. There are less than three floors above A. Only one person lives between C and A. G lives immediately below D. D lives on an even number floor. B lives immediately above A. F lives above E. F does not lives on the 5th floor. F does not lives on an even number floor.

5. Four of the following five belongs to a group find the one that does not belongs to that group?
(a) CD (b) EC (c) FB
(d) AB (e) GC

6. Who among the following lives on the top floor?
(a) E (b) B (c) F
(d) D (e) None of these

7. Number of persons lives above F is same as the number of persons below _ ?
(a) B (b) D (c) C
(d) G (e) None of these

8. How many floors are there above the floor on which G lives?
(a) One (b) Two (c) Three
(d) More than Four (e) Four

9. Who lives immediately below A?
(a) D (b) E (c) F
(d) C (e) None of these

Directions (10-14): Study the following sequence and answer the given questions.

A @ 3 % 4 E N M $ 8 & 6 L D S ♠ 9 8 6 Q Y Z 1 7 % R O G 2 I B 2 U &

10. Which of the following element is twelfth to the left of the twentieth element from the left end of the given arrangement?
(a) 6 (b) & (c) M
(d) $ (e) None of these

11. If all the symbols are dropped from the series, which element will be fourth to the right of the one which is twelfth from the right end?
(a) 9 (b) O (c) R
(d) 7 (e) None of these

12. How many such numbers are there in the given series which are immediately preceded by a symbol and followed by a letter?
(a) None (b) One (c) Two
(d) Three (e) Four

13. Four of the following five are alike in a certain way and forms a group find the one that does not belongs to that group?
(a) 3E% (b) R2 (c) M&$
(d) D9S (e) Y7Z

14. What should come in place of question mark (?) in the following series based on the above arrangement?
34% N$M 6DL 8Q6 ?
(a) %OR (b) 7Z% (c) O%R
(d) R%O (e) R%7

Direction (15-19): Study the following information carefully and answer the question given below-

Seven people viz. P, Q, R, S, T, U and V are sitting around a circular table having equal distance between them. All of them are facing inside.

P sits immediate right of Q. Only one person sits between P and S (either from left or right). U sits third to the right of S. T is an immediate neighbor of U. R sits second to the left of V.

15. If all the persons are arranged according to the alphabetical order in anticlockwise direction starting from P, then how many persons position will remain unchanged (except P)?
(a) Three (b) One (c) Two
(d) None (e) None of these

16. How many persons sits between Q and U, if counted from the left of Q?
(a) One (b) Two (c) Three
(d) None (e) None of these

17. Who sits second to the right of T?
(a) P (b) Q (c) R
(d) S (e) None of these

18. Four of the following five belongs to a group find the one that does not belongs to that group?
(a) VQ (b) PV (c) RT
(d) SU (e) TQ

19. Who among the following sits second to the left of the one who sits 4th to the right of V?
(a) U (b) T (c) R
(d) S (e) None of these

Directions (20-22): In each of the questions below are given some statements followed by two conclusions. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements, disregarding commonly known facts. Give answer

20. Statements:
Only a few lamps are bottles.
No bottle is ship.
Conclusions
I. Some ships are definitely not lamps.
II. All lamps can never be ships.
(a) Both I and II follow
(b) Either I or II follows
(c) Only II follows.
(d) Only I follow.
(e) Neither I nor II follows

21. Statements:
All bamboos are sticks
No bamboos is a fish.
Conclusions:
I. Some sticks are fish.
II. No sticks are fish.
(a) Both I and II follow
(b) Either I or II follows
(c) Only II follows.
(d) Only I follows.
(e) Neither I nor II follows

22. Statements:
Only a few wells are mats.
All pillows are mats.
Conclusions:
I. At least some pillows are wells.
II. All wells can never be pillow.
(a) Both I and II follow
(b) Either I or II follows
(c) Only II follows.
(d) Only I follow.
(e) Neither I nor II follows

Direction (23-27): Study the following information carefully and answer the question given below-

There are ten persons are sitting in two parallel row such that five persons are sitting in each row. A, B, C, D and E are sitting in row 1 and faces north and M, N, O, P and R are sitting in row 2 and faces south such that persons sitting in row 1 faces the persons sitting row 2.

B sits immediate right of A. Neither A nor B sits at the extreme ends. Two person sits between P and N. B faces the one who sits on the immediate left of P. M sits on the immediate right of R. C sits at the end of the row. D sits on the left of E. D does not face R.

23. Four of the following five belongs to a group find the one that does not belongs to that group?
(a) O (b) C (c) D
(d) P (e) N

24. Who among the following sits second to the left of the one who faces B?
(a) R (b) N (c) O
(d) M (e) None of these

25. How many persons sits on the left of N?
(a) One (b) Two (c) No one
(d) Three (e) None of these

26. How many persons sits between D and C?
(a) One (b) Two (c) Three
(d) No One (e) Can't be determined

27. Who among the following faces A?
(a) M (b) N (c) O
(d) R (e) None of these

28. IF 'He will Say' is coded as '1 3 9' and 'Say To Him' is coded as '3 5 2' and 'He May Do' is coded as '8 7 9' then what will be the code of '**will**'?
(a) 3 (b) 1 (c) 9
(d) 8 (e) Can't be determined

29. How many pairs of letters are there in the word "MINUTE" each of which have as many letters between them in the word as they have between them in the English alphabetical series?
(a) Three (b) One (c) Two
(d) More than three (e) None

Direction (30-33): Study the following information carefully and answer the question given below-

There are six persons i.e. A, B, C, D, E and F who all are of different weight. No two persons have same weight. Only two persons are lighter than A. B is heavier than A but lighter than C and D. F is heavier than E but lighter than D. D is not the heaviest. The weight of 2nd heaviest person is 115 kg and the weight of lightest is 56 kg.

30. How many persons are heavier than F?
(a) One (b) Two (c) Three
(d) Four (e) None of these

31. If the sum of weight of E and A is 131 and the sum of weight of D and B is 213, then what is the sum of weight of A and B?
(a) 172 (b) 173 (c) 174
(d) 175 (e) None of these

32. Which among the following person is the 2nd heaviest?
(a) A (b) B (c) C
(d) D (e) None of these

33. Which of the following statement is true?
I. Only two persons are heavier than B.
II. Sum of weight of D and E is 171 Kg.
III. Weight of E is 58 Kg.
(a) Only II (b) Both I and II (c) Both III and II
(d) All are True (e) Only III

Direction (34-36): Study the following information carefully and answer the question given below-
Uncertain number of persons are sitting in a linear row facing north. B sits fifth to the left of E. Two persons sits between B and D. D sits second position from one of the extreme end. Five persons sits between S and E. S is not an immediate neighbor of B. As many as persons sits between E and S as between S and C. As many as persons sits between D and B as between B and F. C sits third position from the extreme end.

34. How many persons are sitting in the row?
(a) 21 (b) 23 (c) 24
(d) 26 (e) Can't be determined

35. If G sits 2nd to the right of S, then what is the position of G from right end?
(a) 7 (b) 9 (c) 8
(d) 6 (e) None of these

36. What is the position of F with respect to E?
(a) Second to the right
(b) Second to the left
(c) Third to the left
(d) Fifth to the Right
(e) None of these

Direction (37-39): Study the following information carefully and answer the question given below-
Point C is 12m west of point A. Point B is 18m north of point A. Point E is 9m south of point D. Point F is 14m west of point E. Point D is 28m east of point B. F is 13m south of point G.

37. Four of the following five belongs to a group find the one that does not belongs to that group?
(a) CB (b) AD (c) AE
(d) BG (e) FB

38. In which direction point A with respect to point G?
(a) North-west (b) South-east (c) South-west
(d) North (e) North-east

39. If Point S is 4m south of point G then what is the distance between point B and point S?
(a) 28m (b) 9m (c) 8m
(d) 14m (e) None of these

40. Find the odd one out?
(a) PSRQ (b) MONL (c) ADCB
(d) VYXW (e) ILKJ

Quantitative Aptitude

Direction (41-44) Find the wrong term in following number series

41. 1, 2, 5, 16, 65, 328, 1957
(a) 5 (b) 328 (c) 16
(d)1957 (e) 65

42. 4, 11, 25, 46, 74, 129, 151
(a) 129 (b) 11 (c) 151
(d) 4 (e) 46

43. 84, 96, 83, 95, 80, 94, 81
(a) 95 (b) 81 (c) 83
(d) 80 (e) 84

44. 3, 5, 8, 17, 33, 58, 94
(a) 8 (b) 94 (c) 58
(d) 3 (e) 5

45. A boat covers 36 km in upstream in 2 hours and 66 km in downstream in 3 hours. Find the speed of boat in still water?
(a) 21km/h (b) 19 km/h (c) 20.5 km/h
(d) 20 km/h (e) 19.5 km/h

46. Two inlet taps A and B can fill a tank in 36 minutes and 60 minutes respectively. Find the time taken by both the taps together to fill $\frac{1}{6}th$ of the tank?
(a) 3 minutes (b) $3\frac{3}{4}$ minutes (c) $3\frac{1}{2}$ minutes
(d) $3\frac{1}{3}$ minutes (e) $2\frac{1}{3}$ minutes

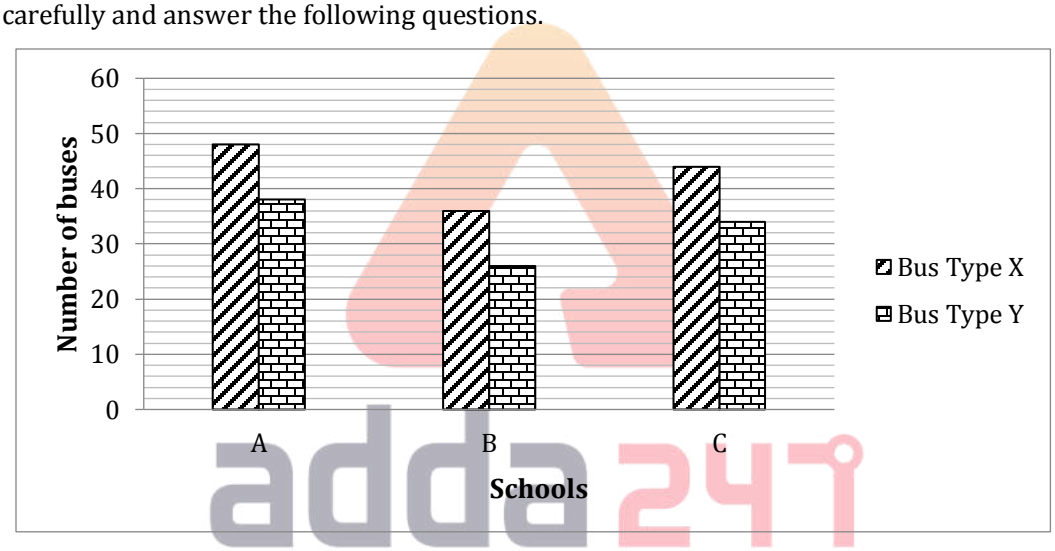
47. If circumference of first circle is 132 cm and circumference of second circle is 110 cm then find the difference between area of both the circle?
(a) 423.5 cm^2 (b) 412.5 cm^2 (c) 420 cm^2
(d) 422.4 cm^2 (e) 419.8 cm^2

48. In 64 liter of pure milk, 20 liter of water is mixed and then $\frac{1}{4}^{th}$ of the mixture is taken out. When x liter of water is added again then ratio of water to that of the milk becomes 1:2. Find value of x?
(a) 10 liter (b) 8 liter (c) 12 liter
(d) 6 liter (e) 9 liter

49. Total cost of x pens and (x-2) pencils is Rs 424. If one pencil and one pen costs Rs 4 and Rs 20 respectively then find x?
(a) 16 (b) 18 (c) 15
(d) 20 (e) 21

50. A is 6 years younger than B and ratio of present age of B to C is 12:5. If ratio of present age of A to C is 2:1 then find present age of B?
(a) 20 years (b) 30 years (c) 24 years
(d) 18 years (e) None of these

Directions (51-55): Given bar graph shows the data of two types of school buses X and Y for three schools A, B and C. Study the chart carefully and answer the following questions.



51. What is the average number of X type buses from school B and school C together?
(a) 40 (b) 70 (c) 30
(d) 59 (e) 54

52. X type buses from school A are how much more than that of X type buses from school B?
(a) $55^5/_{19}\%$ (b) 25% (c) $5^5/_9\%$
(d) $45^5/_6\%$ (e) $33^1/_3\%$

53. What is the average number of all the buses from school B?
(a) 43 (b) 39 (c) 31
(d) 54 (e) 59

54. What is the difference of average number of all buses from school A and average number of all buses from school C?
(a) 16 (b) 4 (c) 8
(d) 24 (e) 12

55. Which school has maximum number of buses?
(a) School B
(b) School C
(c) School A & School C
(d) School A & School B
(e) School A

Directions (56-60): Given below are two equations in each question, which you have to solve and give answer
(a) if$x > y$
(b) if$x \geq y$
(c) if$y > x$
(d) if$y \geq x$
(e) if$x = y$ or no relation can be established

56. **I.** $2x^2 - 5x + 2 = 0$
II. $2y^2 - 9y + 7 = 0$

57. **I.** $3x^2 + 7x + 4 = 0$
II. $y^2 + 9y + 20 = 0$

58. **I.** $x^2 - 7x + 10 = 0$
II. $y^2 - 14y + 45 = 0$

59. **I.** $x^2 - 3x = 4$
II. $y^2 + 6y + 8 = 0$

60. **I.** $x^2 - 3x = 10$
II. $y^2 + 7y + 10 = 0$

Directions (61-65): Following are the details of three shopkeepers and numbers of items sold by them on three different days

Shopkeepers	Monday	Tuesday	Wednesday
A	160	240	210
B	200	180	320
C	150	330	280

61. Find the ratio of items sold by A and B on Monday to items sold by B and C on Wednesday?
(a) 5 : 3 (b) 3 : 5 (c) 3 : 4
(d) 4 : 7 (e) 5 : 8

62. Find the average number of items sold by all 3 shopkeepers on Wednesday?
(a) 280 (b) 290 (c) 270
(d) 250 (e) 260

63. Items sold by A and B together on Tuesday is what percentage of items sold by B and C on Wednesday?
(a) 70% (b) 75% (c) 60%
(d) 65% (e) 80%

64. Find the difference of number of items sold by B on Monday and Tuesday together and items sold by A on Tuesday and Wednesday?
(a) 80 (b) 60 (c) 50
(d) 70 (e) 100

65. Find the ratio of items sold by B on all 3 days together to the items sold by C on all 3 days?
(a) 35 : 38 (b) 38 : 35 (c) 30 : 34
(d) 30 : 38 (e) 35 : 41

66. Marked price of an article is Rs 250 more than cost price of that article and it is sold at a discount of 15% on marked price. Find the cost price of the article if the profit percent earned is 27.5%?
(a) Rs 600 (b) Rs 550 (c) Rs 500
(d) Rs 750 (e) Rs 900

67. In year 2016, ratio of boys to girls in a school is 36:19. And in year 2017, number of boys is increased by 1440 and number of girls is increased by 15%. If in 2017, there were total increase in the number of students is 1725 then find the increased number of boys in the school.
(a) 7240 (b) 5440 (c) 6040
(d) 4440 (e) 5040

68. If ratio of salary of A to that of B is 1:3 and each spends 15% of his salary on house rent. Find the house rent paid by A if remaining amount with A and B together is Rs 42500.
(a) Rs 1800 (b) Rs 1845 (c) Rs 1785
(d) Rs 1760 (e) Rs 1875

69. A started a business by investing Rs. 50,000. After 6 months B joined him by investing Rs. 75,000. After another 6 months C joined with Rs. 1,25,000. What is the ratio of profit shared after 2 years among A, B and C?
(a) 4 : 5 : 6 (b) 8 : 9 : 10 (c) 8 : 9 : 12
(d) 4 : 5 : 8 (e) None of these

70. At what rate will a sum of Rs. 1000 amounts to Rs. 1102.50 in 2 years at compound interest?
(a) 6.5% (b) 6% (c) 5%
(d) 5.5% (e) None of these

Directions (71-80): What should come in place of question mark (?) in the following questions?

71. $?^2 = 40\%$ of $\frac{5}{11}$ of 352
(a) 12 (b) 16 (c) 6
(d) 4 (e) 8

72. $?^2 = \left(\sqrt{1444} + \sqrt{676}\right) \div 4$
(a) 6 (b) 16 (c) 8
(d) 2 (e) 4

73. $\left(\frac{?-0.5}{0.2}\right) = \frac{120}{2}$
(a) 30 (b) 12.5 (c) 25
(d)17.5 (e) 22.5

74. $60\%\ of\ ? - \sqrt{324} = 222$
(a) 600 (b) 250 (c) 200
(d) 400 (e) 350

75. $\frac{2^3 \times 3^2}{(90 \div ?)} = \sqrt{64}$
(a) 15 (b) 12 (c) 10
(d) 11 (e) 16

76. $\sqrt{4 \times ?} = \frac{160}{10}$
(a) 64 (b) 60 (c) 68
(d) 56 (e) 72

77. $\sqrt{5929} + \sqrt{8464} = (?)^2$
(a) 17 (b) 21 (c) 15
(d) 13 (e) 11

78. $7\frac{1}{2} - 2\frac{1}{2} = \frac{50}{?}$
(a) 8 (b) 5 (c) 15
(d)12 (e) 10

79. $\left[\left(2 \times \frac{1}{4}\right) + 4\right] \times 8 = ? \times 10$
(a) 4.8 (b) 3.6 (c) 2.4
(d) 3.2 (e) 4.2

80. $80\%\ of\ (1.5 \times 4 + ?) = 24$
(a) 30 (b) 36 (c) 24
(d) 28 (e) 42

Solutions

REASONING ABILITY

Directions (1-4):

1. (a); 2. (b) 3. (c)

4. (d);

Direction (5-9):

Floors	Person
7	F
6	B
5	A
4	E
3	C
2	D
1	G

5. (e); 6. (c); 7. (d);

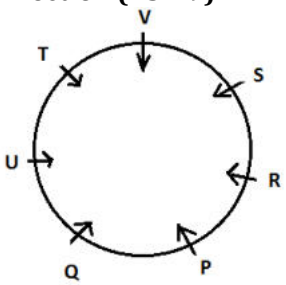
8. (d); 9. (b);

Directions (10-14):

10. (c); 11. (c); 12. (d);

13. (b); 14. (a)

Direction (15-19):

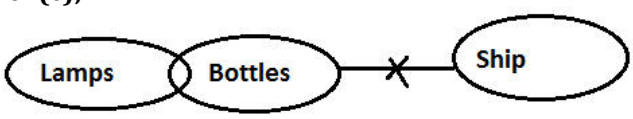


15. (c); 16. (d); 17. (b);

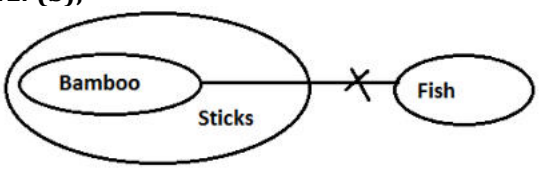
18. (e); 19. (a);

Directions (20-22):

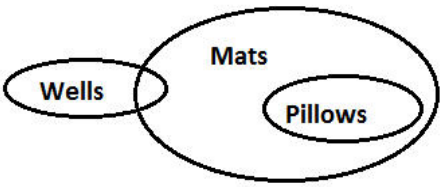
20. (c);



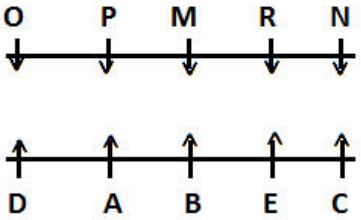
21. (b);



22. (c)



Direction (23-27):



23. (d); 24. (b); 25. (c);

26. (c); 27. (e); 28. (b);

29. (c);

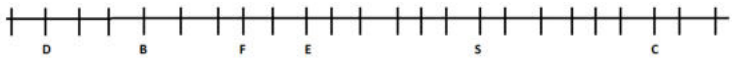
Direction (30-33):

C > D (115kg) > B > A > F > E (56kg)

30. (d); 31. (b); 32. (d);

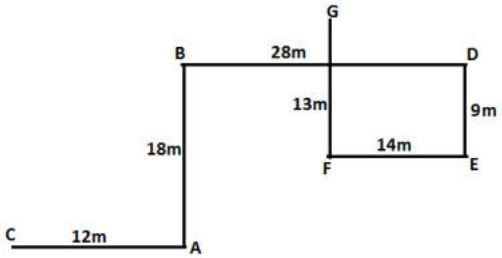
33. (b);

Direction (34-36):



34. (c); 35. (a) 36. (b)

Direction (37-39):



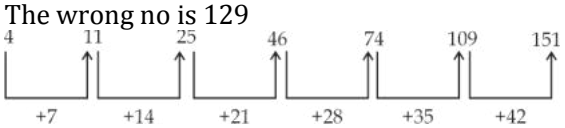
37. (e); 38. (c) 39. (d)

40 (b);

Quantitative Aptitude

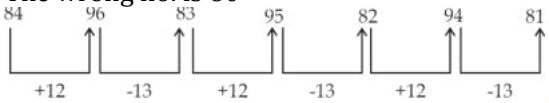
41. (b); The wrong no. is 328
$1 \times 1 + 1 = 2$
$2 \times 2 + 1 = 5$
$5 \times 3 + 1 = 16$
$16 \times 4 + 1 = 65$
$65 \times 5 + 1 = 326$
$326 \times 6 + 1 = 1957$
So, there should be 326 instead of 328

42. (a); The wrong no is 129



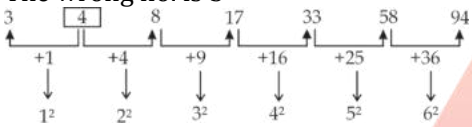
So, there should be 109 instead of 129

43. (d); The wrong no. is 80



So, there should be 82 instead of 80

44. (e); The wrong no. is 5



So, there should be 4 instead of 5.

45. (d); Upstream speed of boat=18 km/hr
Downstream speed of boat=22 km/hr
Speed of boat in still water=$\frac{18+22}{2} = 20\ km/h$

46. (b); Let the capacity of the tank be 180 units (LCM of 36 and 60)
Efficiency of tap A=5 units/ minute
Efficiency of tap B=3 units/minute
$\frac{1}{6}^{th}$ of the tank= 30 units
Required time=$\frac{30}{5+3} = 3\frac{3}{4}$ minutes

47. (a); Radius of first circle=$\frac{132\times7}{2\times22} = 21\ cm$
Area of first circle= $\frac{22}{7} \times 21 \times 21 = 1386\ cm^2$
Radius of second circle=$\frac{110\times7}{2\times22} = 17.5$ cm
Area of second circle= $\frac{22}{7} \times 17.5 \times 17.5 = 962.5$ cm^2
Required difference=423.5 cm^2

48. (e); Ratio of milk to that of water in the initial mixture=16:5
$\frac{1}{4}th$ of the mixture=21 liter
$\frac{64-21\times\frac{16}{21}}{20-21\times\frac{5}{21}+x} = \frac{2}{1}$
$x = 9$ liter

49. (b); ATQ
$20x + 4 \times (x - 2) = 424$
$24x = 432$
$x = 18$

50. (e); Let present age of B and C be 12x years and 5x years respectively.
Then present age of A=$10x$ years
ATQ
$12x - 10x = 6$
$x = 3$
Present age of B=36 years

51. (a); Average number of X type buses from school B and school C together = $\frac{36+44}{2} = 40$

52. (e); X type buses of school A = 48
X type buses of school B = 36
Required value = $\frac{48-36}{36}$ X 100 = $33\frac{1}{3}\%$

53. (c); Average number of all the buses from school B = $\frac{36+26}{2} = 31$

54. (b); Average number of all the buses from school A = $\frac{48+38}{2} = 43$
Average number of all the buses from school C = $\frac{44+34}{2} = 39$
Required difference = 43 – 39 = 4

55. (e); Total buses from school A = 48 + 38 = 86
Total buses from school B = 36 + 26 = 62
Total buses from school C = 44 + 34 = 78
Clearly, School A has maximum number of buses.

56. (e)

I. $2x^2 - 4x - x + 2 = 0$
$\Rightarrow 2x(x-2) - 1(x-2) = 0$
$\Rightarrow (2x-1)(x-2) = 0$
$\Rightarrow x = \frac{1}{2}, 2$

II. $2y^2 - 9y + 7 = 0$
$\Rightarrow 2y^2 - 7y - 2y + 7 = 0$
$\Rightarrow y(2y-7) - 1(2y-7) = 0$
$\Rightarrow y = \frac{7}{2}, 1$

$\therefore$ No relation

57. (a)

I. $3x^2 + 3x + 4x + 4 = 0$
$\Rightarrow 3x(x+1) + 4(x+1) = 0$
$\Rightarrow x = -1, {}^{-4}/_{3}$

II. $y^2 + 5y + 4y + 20 = 0$
$\Rightarrow y(y+5) + 4(y+5) = 0$
$\Rightarrow y = -4, -5$

$\therefore x > y$

58. (d)

I. $x^2 - 5x - 2x + 10 = 0$
$\Rightarrow x(x-5) - 2(x-5) = 0$
$\Rightarrow x = 2, 5$

II. $y^2 - 9y - 5y + 45 = 0$
$\Rightarrow y(y-9) - 5(y-9) = 0$
$\Rightarrow y = 9, 5$

$\therefore x \leq y$

59. (a); **I.** $x^2 - 3x - 4 = 0$
$x^2 - 4x + x - 4 = 0$
$(x - 4)(x + 1) = 0$
$x = 4, -1$
II. $y^2 + 6y + 8 = 0$
$y^2 + 2y + 4y + 8 = 0$
$(y + 2)(y + 4) = 0$
$y = -2, -4$
$\Rightarrow x > y$

60. (b); **I.** $x^2 - 3x = 10$
$x^2 - 3x - 10 = 0$
$x^2 - 5x + 2x - 10 = 0$
$(x - 5)(x + 2) = 0$
$x = -2, 5$
II. $y^2 + 7y + 10 = 0$
$y^2 + 5y + 2y + 10 = 0$
$(y + 5)(y + 2) = 0$
$y = -2, -5$
$\Rightarrow x \geq y$

61. (b); items sold by A and B on Monday = 200 + 160 = 360
Item sold by B and C on Wednesday = 320 + 280 = 600
$\therefore$ Required ratio = $\frac{360}{600} = \frac{6}{10} = \frac{3}{5}$

62. (c); Average of items sold by A, B, C on Wednesday = $\frac{210+320+280}{3} = \frac{810}{3} = 270$

63. (a); items sold by A and B on Tuesday = 240 + 180 = 420
Items sold by B and C on Wednesday = 320 + 280 = 600
$\therefore$ Required percentage = $\frac{420\times100}{600}$
= 70%

64. (d); items sold by B on Monday and Tuesday = 200 + 180 = 380
Items sold by A on Tuesday and Wednesday = 240 + 210 = 450
$\therefore$ Required difference = 450 – 380 =70

65 (a); Item sold by B on all 3 days = 200 +180 + 320 = 700
Items sold by C on all 3 days = 150 + 330 + 280 = 760
Required ratio = $\frac{700}{760} = \frac{35}{38}$

66. (c); Let the marked price be Rs 100x
Then selling price= Rs 85x
Cost price=$Rs\frac{200}{3}x$
ATQ
$100x - \frac{200}{3}x = 250$
$x = 7.5$
Cost price=Rs 500

67. (e); Let the number of students in the exam be 55x
Then number of boys= 36x
Number of girls=19x
ATQ
$55x + 1725 = (36x + 1440) + 19x \times 1.15$
$x = 100$
Increased number of boys=3600+1440=5040

68. (e); Let the salary of A and B be Rs 100x and Rs 300x respectively
ATQ
$85x + 255x = 42500$
$x = 125$
House rent paid by A=Rs 1875

69. (b);

	A	:	B	:	C
Capital →	50000	:	75000	:	1,25,000
Time →	2		$\frac{3}{2}$		1
Profit →	100000	:	112500	:	125000

Required ratio = 8:9:10

70. (c); ATQ, $\frac{1102.50}{1000} = \left(1 + \frac{r}{100}\right)^2$
or, $\left(1 + \frac{r}{100}\right)^2 = \left(\frac{105}{100}\right)^2$
or, $\left(1 + \frac{r}{100}\right)^2 = \left(1 + \frac{5}{100}\right)^2$
Thus, on comparing, $r = 5\%$

71. (e); $?^2 = 40\%$ of $\frac{5}{11} \times 352$
$?^2 = \frac{2}{5} \times \frac{5}{11} \times 352 = 64 \Rightarrow ? = 8$

72. (e); $?^2 = \frac{(\sqrt{1444}+\sqrt{676})}{4} = \frac{38+26}{4} = \frac{64}{4} = 16 \Rightarrow ? = 4$

73. (b); $(? - 0.5) = 60 \times 0.2$
$? = 12 + 0.5 = 12.5$

74. (d); $\frac{60}{100} \times ? - 18 = 222$
$\frac{60}{100} \times ? = 240$
$? = \frac{240\times100}{60} \Rightarrow ? = 400$

75. (c); $\frac{8\times9\times?}{90} = 8$
$? = \frac{90\times8}{8\times9} = 10 \Rightarrow ? = 10$

76. (a); $\sqrt{4 \times ?} = 16$
$4 \times ? = 256$
$? = 64$

77. (d); $77 + 92 = ?^2$
$169 = ?^2 \Rightarrow ? = 13$

78. (e); $5 = \frac{50}{?} \Rightarrow ? = 10$

79. (b); $\frac{9}{2} \times 8 = ? \times 10 \Rightarrow ? = 3.6$

80. (c); $\frac{80}{100} \times (6 + ?) = 24$
$6 + ? = 30 \Rightarrow ? = 24$

Mock 40

IBPS RRB Clerk Prelims 2018

REASONING ABILITY

Directions (1-5): Read the following information carefully and answer the questions given below.
Six persons J, P, Q, R, V, Z are sitting in a row. Some of them are facing north while some of them are facing south. J sits second from one of the extreme end of the row. P sits third to the right of J. R is not an immediate neighbor of P and Z. Both the immediate neighbors of V faces opposite direction. Both the Immediate neighbors of Z faces same direction. V sits second to the left of P. Q sits to the right of R. R faces north. Q faces same direction as Z.

1. Four of the following five are alike in a certain way, and so form a group. Which of the following does not belong to the group?
(a) R, V (b) V, P (c) J, P
(d) V, Q (e) J, R

2. What is the position of Q with respect to Z?
(a) Second to the left (b) Third to the right
(c) Third to the left (d) Fifth to the right
(e) Second to the right

3. Who amongst the following sits exactly between Z and J?
(a) R (b) P (c) Q
(d) Both V and Q (e) V

4. How many persons in the given arrangement are facing North?
(a) More than four (b) Four
(c) One (d) Three (e) Two

5. Who is sitting 4th to the right of Q?
(a) R (b) Z (c) P
(d) J (e) None of these

Directions (6-8): Some statements are given followed by two conclusions. You have to consider the statements to be true even if they seem to be at variance from commonly known facts. You have to decide which of the following conclusions follow from the given statements:

6. **Statements**: –No symbol is letter. All expression are letter. Some symbols are word.
Conclusions:
I. No word is letter.
II. Some symbols being expression is possibility.
(a) Only I follows
(b) Only II follows
(c) Either I or II follows
(d) Neither I nor II follows
(e) Both I and II follow

7. **Statements:** Some logic are answers. All keys are answers.
Conclusions:
I. All keys are logic.
II. No keys are logic.
(a) Only I follows
(b) Only II follows
(c) Either I or II follows
(d) Neither I nor II follows
(e) Both I and II follow

8. **Statement:** –All numbers are digits. Some numbers are points. Some points are marks.
Conclusions:
I. Some points are digits.
II. All marks being numbers is a possibility.
(a) Only I follows
(b) Only II follows
(c) Either I or II follows
(d) Neither I nor II follows
(e) Both I and II follow

Directions (9-13): Read the following information carefully and answer the questions given below.
Seven boxes M, N, O, P, Q, R, S are arranged one above another. Only two boxes are placed above box P. Only one box is placed between box S and P. As many as boxes are placed between box S and Q as between box Q and M. Three boxes are placed between box N and O. N is placed above O.

9. How many total numbers of boxes are placed in between box S and Q?
(a) Two (b) One (c) Three
(d) More than three (e) None

10. Which of the following is true regarding Box N?
(a) Three boxes are placed between box Q and N
(b) Box N is placed below Q
(c) Box N is placed at top
(d) Only one box is placed above box N
(e) No box is placed between box N and R

11. Which box is placed at top?
(a) S (b) N (c) Q
(d) R (e) M

12. Which box is placed immediately above box Q?
(a) M (b) P (c) S
(d) N (e) R

13. How many boxes are placed in between R and M?
(a) Two (b) One (c) Three
(d) More than three (e) None

Directions (14-18): Answer these questions based on the following information.
In a certain code:
"arrange things in order" is coded as - "po gb ik mn"
"order for new things" is coded as - "po gb fc bv"
"new places to order" is coded as - "gb cq bv ra"
"places in unknown country" is coded as – " de ra lf ik"

14. What will be the code for "order"?
(a) gb (b) fc (c) cq
(d) ik (e) can't be determined

15. What may be the code for "things to vanish"?
(a) po cq hx (b) po vm ik
(c) cq fc ik (d) either (a) or (b)
(e) None of these

16. What will be the code for " arrange"?
(a) gb (b) mn (c) cq
(d) ik (e) can't be determined

17. What may be the code for " in country"?
(a) lf ik
(b) de ik
(c) po gb
(d) either (a) or (b)
(e) None of these

18. "bv" is the code for?
(a) things (b) new (c) arrange
(d) places (e) None of these

Directions (19-23): Read the following information carefully and answer the questions given below.
Six persons A, C, Q, R, T, Y were born in six different months January, April, May, August, September, December of a year. Three persons were born in between A and Y. A was born before Y. No one was born in between C and A. Two persons were born in between C and R. T was born before Q.

19. Who among the following was born in May?
(a) C (b) A (c) Q
(d) T (e) Y

20. How many persons were born between A and Q?
(a) One (b) Three (c) Four
(d) Two (e) None of these

21. How many persons born were before R?
(a) One (b) Three (c) Four
(d) Two (e) None of these

22. Who among the following is the oldest?
(a) C (b) A (c) Q
(d) T (e) Y

23. Which of the following is not true regarding Y?
(a) Four persons born between C and Y
(b) R was born before Y
(c) Q is born immediately after Y
(d) Only Q was born between Y and R
(e) No one was born after Y

24. A family consists of five members A, P, R, T, H. P is wife of A. R is the daughter of A. R has only one brother T. H is daughter-in-law of P. How is H related to R?
(a) mother (b) sister-in-law
(c) daughter (d) daughter-in-law
(e) none of these

25. If the digits of the number "46752983" are arranged in increasing order form left to right within the number, then how many digits will remain on the same position after the applied operation?
(a) Two (b) One (c) Three
(d) Four (e) None of these

26. How many meaningful words can be made by using letters 'A', 'E', 'L' and 'T', keeping L as the first letter of the word?
(a) One (b) Two (c) Three
(d) Four (e) None of these

Directions (27-31): Read the following information carefully and answer the questions given below.
Point E is 15m east of point B. Point G is 20m north of point E. Point K is 10m east of point G. Point M is 30m south of point K. Point P is 20m west of point M. Point L is 10m north of point P.

27. If Point V is 10m east of point S and Point S is 10m north of point L, then what will be the distance between point E and V?
(a) 10m (b) 15m (c) 20m
(d) 5m (e) 25m

28. What is the total distance between point B and L?
(a) 10m (b) 15m (c) 20m
(d) 5m (e) 30m

29. If Point Z is 10m north of point M, then point what is the distance between point E and Z?
(a) 10m (b) 15m (c) 20m
(d) 25m (e) 30m

30. Point K is in which direction from point P?
(a) South (b) South-east (c) North
(d) North-east (e) North-west

31. Four of the following five are alike in a certain way, and so form a group. Which of the following does not belong to the group?
(a) P, L (b) P, M (c) G, E
(d) L, E (e) G, B

Directions (32-36): These questions are based on the following arrangement. Study it carefully and answer the questions below it.
1 3 5 3 4 5 9 2 8 7 2 3 6 5 2 7 3 8 1 2 1 8 4 9 8 1 2 4 7 3 5 2 4 8 9 8 2 4

32. Which element is exactly midway between the seventh element from the left end and sixteenth from the right end?
(a) 8 (b) 2 (c) 5
(d) 6 (e) 7

33. How many perfect squares are there to the right of the fourteenth element from the right end?
(a) Two (b) One (c) Three
(d) Four (e) more than four

34. How many perfect cubes are there in the above arrangement, each of which is immediately preceded by an odd number and immediately followed by an even number?
(a) None (b) Three (c) Two
(d) One (e) More than three

35. How many such odd digits are there in the given arrangement, each of which is immediately followed and preceded by an odd number?
(a) None (b) One (c) Two
(d) Three (e) More than three

36. Which of the following element is 5th to the right of 10th from the right end?
(a) 9 (b) 8 (c) 2
(d) 1 (e) 4

Directions (37-40): Read the following information carefully and answer the questions given below.
There are six wallets A, B, C, P, Q and R, each containing different amount of money in it. Wallet B has more money than wallet Q but less than wallet P. Only wallet R has more money than wallet C. Wallet Q does not has the least amount of money. The wallet containing 3rd highest amount of money has Rs. 3000, which is Rs.1000 more than the wallet which has 2nd lowest amount of money.

37. Which of the following wallet has the least amount of money?
(a) A (b) B (c) C
(d) Q (e) P

38. What may be the amount of money in wallet C?
(a) Rs. 2500 (b) Rs. 2000 (c) Rs. 3500
(d) Rs. 2250 (e) Rs. 2100

39. What may be the amount of money in wallet B, if it has Rs. 250 less than the wallet P?
(a) Rs. 2500 (b) Rs. 2750 (c) Rs. 3500
(d) Rs. 3250 (e) Rs. 2200

40. Which of the following is true regarding wallet P?
(a) Only wallet A has less money than wallet P
(b) Wallet B has more money than wallet P
(c) Wallet P has 3rd highest amount of money
(d) Wallet Q has more amount of money than P
(e) none of these

QUANTITATIVE APTITUDE

41. The upstream speed of a boat is 18 km/hr which is 500% more than the speed of stream. Find how much distance boat will cover in 3 hours while travelling in downstream.
(a) 66 km (b) 63 km (c) 72 km
(d) 75 km (e) 78 km

42. If $A^2 - B^2 = 252$ and $A + B = 42$ then find the value of 'B'?
(a) 18 (b) 16 (c) 14
(d) 20 (e) 22

43. A alone can do a work in 40 days. The ratio of time taken by A and B to do the same work is 5 : 3. Then, find in how many days both will complete the work together ?
(a) 18 days (b) 12 days (c) 20 days
(d) 15 days (e) 10 days

44. A train having speed of 72 km/hr crosses a pole in 18 sec and a platform in 33 sec. Find the length of platform?
(a) 320 m (b) 300 m (c) 330 m
(d) 360 m (e) 350 m

45. The circumference of a circle is 66 cm. Find the approximate area of square if the radius of circle is two times of the side of a square.
(a) 18 cm^2 (b) 32 cm^2 (c) 25 cm^2
(d) 36 cm^2 (e) 28 cm^2

Directions (46-50): What approximate value should come in place of question mark (?) in the following questions?

46. $\sqrt{1443.98} \div 18.98 + 328.1 = ? \times 22.01$
(a) 10 (b) 12 (c) 18
(d) 15 (e) 22

47. 29.98% of 880.001 = ? + 110.9
(a) 144 (b) 153 (c) 158
(d) 160 (e) 163

48. $(?)^2 + 255.93 =$ 49.932% of 800.112
(a) 12 (b) 8 (c) 15
(d) 18 (e) 6

49. $\sqrt[3]{1728.01}+? = 256.01$
(a) 230 (b) 235 (c) 238
(d) 241 (e) 244

50. 74.91% of ? = $(17.932)^2$
(a) 420 (b) 425 (c) 408
(d) 432 (e) 444

Directions (51-55):-Find the wrong number in the given number series questions.

51. 100, 118, 136, 149, 160, 167, 172
(a) 172 (b) 160 (c) 100
(d) 118 (e) 136

52. 1.5, 2.5, 6, 24, 100, 505, 3036
(a) 1.5 (b) 6 (c) 100
(d) 3036 (e) 2.5

53. 160, 80, 80, 120, 240, 600, 900
(a) 240 (b) 120 (c) 160
(d) 900 (e) 600

54. 5040, 2520, 840, 210, 42, 8, 1
(a) 8 (b) 5040 (c) 840
(d) 1 (e) 42

55. 15, 17, 26, 151, 200, 929, 1050
(a) 17 (b) 1050 (c) 15
(d) 929 (e) 26

Direction (56-60): There are total five departments in a company. There are total 90 employees in Finance department which is 25% of total employees in the company. 2/9 of the total employees of the company are working in HR department. Employees working in Sales department is 25% more than that in HR department. Ratio between employees working in Security and Housing department is 4 : 5.

56. Find number of employees working in HR department is what percent more than number of employees working in Security department?
(a) 250% (b) 200% (c) 150%
(d) 100% (e) 50%

57. Find the average number of employees working in Sales, Finance and Housing department?
(a) 60 (b) 70 (c) 80
(d) 90 (e) 100

58. Number of employees in Housing department is how much more than number of employees in Security department?
(a) 10 (b) 20 (c) 30
(d) 40 (e) 50

59. In Security department, 40% are female employees then find total male employees working in Security department?
(a) 16 (b) 40 (c) 32
(d) 8 (e) 24

60. Ratio between total number of male and female employees in HR department is 2 : 3. Find total number of female employees working in HR department?
(a) 32 (b) 48 (c) 64
(d) 40 (e) 56

Directions (61-70): What value should come in place of question mark (?) in the following questions?

61. $?^2 = 4^2 + 8^2 - 31$
(a) 6 (b) 7 (c) 8
(d) 9 (e) 10

62. $13 \times 6 + ? \times 4 = 18 \times 7$
(a) 6 (b) 8 (c) 10
(d) 12 (e) 14

63. 40% *of* ? = 25% *of* 320 + 75% *of* 160
(a) 500 (b) 400 (c) 300
(d) 200 (e) 100

64. $11^2 + 6^2 = ? + 37$
(a) 130 (b) 110 (c) 120
(d) 140 (e) 150

65. $\frac{360}{?} = 12 \times 6 - 3^3$
(a) 9 (b) 5 (c) 6
(d) 7 (e) 8

66. $\sqrt{225} + \sqrt{441} = ?^2$
(a) 3 (b) 4 (c) 5
(d) 6 (e) 8

67. $16 \times 8 - ? = 2^6$
(a) 64 (b) 32 (c) 128
(d) 192 (e) 96

68. $16 \times 54 \div 36 + 6 = ?$
(a) $\frac{144}{7}$ (b) 30 (c) 20
(d) 24 (e) 16

69. $? = \sqrt{6 \times 3 \times 5 + 50\% \text{ of } 620}$
(a) 14 (b) 16 (c) 18
(d) 10 (e) 20

70. $6^2 = \frac{18 \times 8 - ? \times 2}{3}$
(a) 36 (b) 27 (c) 18
(d) 9 (e) 54

Direction (71-75): - Table given below shows marks obtained by four students in four different subjects in an exam. Study the data carefully and answer the following questions

Subjects / Students	English	Hindi	Science	Maths
Paul	65	60	80	65
Aditya	75	75	60	75
Neeraj	85	55	95	85
Sandy	60	60	65	60

71. Marks scored by Sandy in English and Maths together is what percent of the Marks scored by Aditya and Neeraj in English together?
(a) 25% (b) 50% (c) 75%
(d) 100% (e) 125%

72. Find the ratio of total marks scored by all four students together in Hindi to total marks scored by all four students together in Science?
(a) 5 : 6 (b) 57 : 50 (c) 1 : 1
(d) 20 : 19 (e) 6 : 5

73. Total marks scored by Paul are how much more/less than total marks scored by Neeraj?
(a) 70 (b) 60 (c) 40
(d) 50 (e) 80

74. Find the average of the marks scored by Aditya in English, Hindi and Science together?
(a) 65 (b) 85 (c) 80
(d) 75 (e) 70

75. If maximum marks for each subject are 100 then find what percentage of total marks is obtained by Sandy?
(a) 64.25% (b) 61.25% (c) 67.25%
(d) 70.25% (e) 73.25%

76. An article was sold at a discount of 20% at Rs. 1020. If the article was sold at discount of Rs. 199 in place of 20% discount then find the selling price.
(a) Rs. 1066 (b) Rs. 1076 (c) Rs. 1086
(d) Rs. 1096 (e) Rs. 1094

77. The total age of A, B and C four years hence will be 98 years. Find the age of C four years hence if the present age of A and B is 32 years and 23 years respectively.
(a) 31 yr. (b) 32 yr. (c) 35 yr.
(d) 37 yr. (e) 33 yr.

78. A invests Rs. 12,000 for X months while B invests Rs. 16,000 for 9 months in a scheme. The profit share of B is Rs. 12,000 out of total profit Rs. 21,000. Then find the value of X ?
(a) 6 months (b) 9 months (c) 8 months
(d) 7 months (e) 10 months

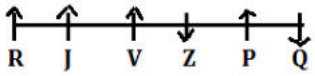
79. A mixture of milk and water contains 60% milk and remaining water. How much water should be added (in percentage) in mixture to reverse the proportion of milk and water?
(a) 25% (b) 37.5% (c) 62.5%
(d) 75% (e) 50%

80. The simple interest on a certain sum for 2 years at 8% per annum is Rs. 225 less than the compound interest on the same sum for 2 years at 10% per annum. The sum is:
(a) Rs. 3200 (b) Rs. 4200 (c) Rs. 4000
(d) Rs. 3600 (e) Rs. 4500

Solutions

REASONING ABILITY

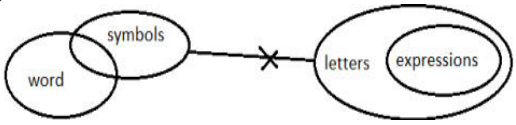
Direction (1-5):



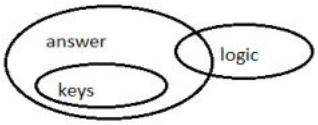
1. (d) **2. (a)** **3. (e)**
4. (b) **5. (d)**

Directions (6-8):

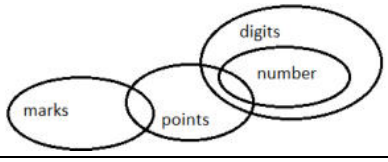
6. (d);



7. (d);



8. (e);



Direction (9-13):

Boxes
S
N
P
Q
R
O
M

9. (a) **10. (d)** **11. (a)**
12. (b) **13. (b)**

Directions (14-18):

Word	Code
Places	ra
Order	gb
New	bv
To	cq
Things	po
For	fc
In	ik
Arrange	mn
Unknown/country	de/lf

14. (a) **15. (a)** **16. (b)**

17. (d) **18. (b)**

Direction (19-23):

Months	Persons
January	C
April	A
May	T
August	R
September	Q
December	Y

19. (d) **20. (d)** **21. (b)**

22. (a) **23. (c)**

24. (b)

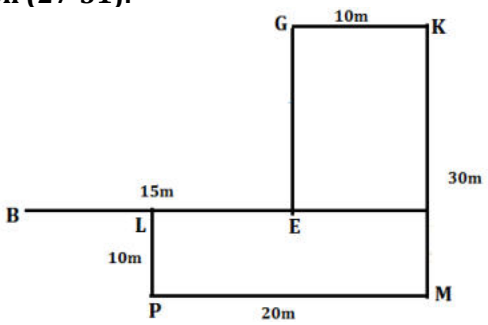
A(+) = P(-)
|
R(-) — T(+) = H(-)

25. (a)

4 6 7 5 2 9 8 3
| |
2 3 4 5 6 7 8 9

26. (b); LATE, LEAT

Direction (27-31):



27. (a) **28. (d)** **29. (a)**

30. (d) **31. (e)** **32. (b)**

33. (e);

34. (c); 184,982

35. (d); 735,135,353

36. (b);

Directions (37-40): R > C > P (Rs. 3000) > B > Q (Rs.2000) > A

37. (a); **38. (c);** **39. (b);**

40. (c);

QUANTITATIVE APTITUDE

41. (c); Let the speed of stream be x km/hr
Then,
Speed of upstream = $x \times \frac{600}{100} = 18$
$\Rightarrow x$ = 3km/hr
Speed of boat in still water = 18 + 3 = 21 km/hr
Distance covered in 3 hours in downstream = (21 + 3) × 3 = 72 km

42. (a); $(A+B)(A-B) = 252$
$\Rightarrow 42 \times (A-B) = 252$ $[A+B = 42\ given]$
$\Rightarrow (A-B) = 6$ ...(i)
And $A + B = 42$ ...(ii)
Solve (i) and (ii), we get
$B = 18$

43. (d); Let the time taken by A and B be $5x$ days and $3x$ days respectively.
$\Rightarrow 5x$ = 40 days
$\Rightarrow x$ = 8 days
B's time = 3 × 8 = 24 days
Time taken by both together to complete the work
$= \frac{40\times24}{40+24}$ $[use\ \frac{a\times b}{a+b}$ for two persons]
= 15 days.

44. (b); Speed of train = 72 km/hr
$= 72 \times \frac{5}{18} = 20$ m/s
Length of train = 18 × 20 = 360 m
Length of (train + platform)
= 20 × 33 = 660 m
∴ length of platform = 660 m – 360 m
= 300 m

45. (e); ATQ,
$2\pi r = 66$ cm
$\Rightarrow 2 \times \frac{22}{7} \times r = 66$ cm
$\Rightarrow r = \frac{66\times7}{44} = \frac{21}{2}$ cm
Side of a square = $\frac{21}{2\times2} = \frac{21}{4}$ cm
∴ Area of square = $(\text{side})^2 = \left(\frac{21}{4}\right)^2$
$= \frac{441}{16} \approx 28\ cm^2$

46. (d); $\sqrt{1444} \div 19 + 328 = ? \times 22$
$\Rightarrow 2 + 328 = ? \times 22$
$\Rightarrow ? = \frac{330}{22} = 15$

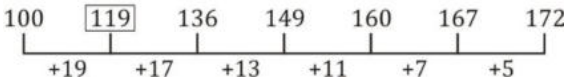
47. (b); 30% of 880 = ? + 111
$\Rightarrow \frac{30\times880}{100} = ? + 111$
$\Rightarrow ?$ = 264 – 111 = 153.

48. (a); $(?)^2 + 256 = \frac{50\times800}{100}$
$(?)^2 + 256 = 400$
$\Rightarrow (?)^2 = 144$
$\Rightarrow ? = 12$

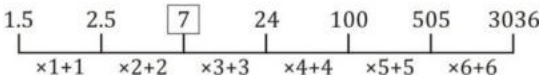
49. (e); $12 + ? = 256$
$\Rightarrow ? = 244$

50. (d); $\frac{75\times?}{100} = (18)^2$
$\Rightarrow \frac{75\times?}{100} = 324$
$\Rightarrow ? = \frac{324\times100}{75} = 432.$

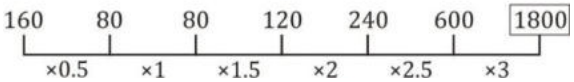
51. (d);



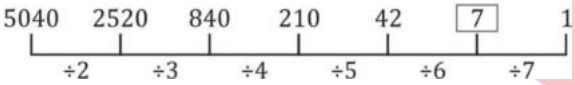
52. (b);



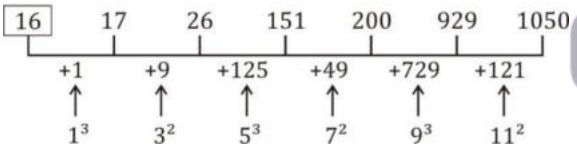
53. (d);



54. (a);



55. (c);



Solution (56-60): Let total employees in company be 100x
ATQ,
$\frac{25}{100} \times 100x = 90$
$\Rightarrow$ Total employees in company = $100x = 360$
Employees working in HR department
$= \frac{2}{9} \times 360 = 80$
Employees working in Sales department
$= \frac{125}{100} \times 80 = 100$
Remaining employees = $360 - 90 - 80 - 100 = 90$
Employees working in Security department
$= \frac{4}{9} \times 90 = 40$
Employees working in Housing department
$= \frac{5}{9} \times 90 = 50$

Sales	Finance	HR	Security	Housing	Total
100	90	80	40	50	360

56. (d); Required % = $\frac{80-40}{40} \times 100 = \frac{40}{40} \times 100$
$= 100\%$

57. (c); Required average = $\frac{100+90+50}{3} = \frac{240}{3} = 80$

58. (a); Required difference = $50 - 40 = 10$

59. (e); Total number of male employees working in Security department = $\frac{60}{100} \times 40 = 24$

60. (b); Total number of female employees working in HR department = $\frac{3}{5} \times 80 = 48$

61. (b); $?^2 = 4^2 + 8^2 - 31$
$?^2 = 16 + 64 - 31 = 80 - 31 = 49$
$? = 7$

62. (d); $13 \times 6 + ? \times 4 = 18 \times 7$
$78 + ? \times 4 = 126$
$? = \frac{126-78}{4} = 12$

63. (a); $40\%\ of\ ? = 25\%\ of\ 320 + 75\%\ of\ 160$
$\frac{2}{5} \times ? = \frac{25}{100} \times 320 + \frac{75}{100} \times 160$
$\frac{2}{5} \times ? = 80 + 120$
$? = 200 \times \frac{5}{2} = 500$

64. (c); $11^2 + 6^2 = ? + 37$
$121 + 36 - 37 = ?$
$? = 120$

65. (e); $\frac{360}{?} = 12 \times 6 - 3^3$
$\frac{360}{?} = 72 - 27$
$? = \frac{360}{45} = 8$

66. (d); $\sqrt{225} + \sqrt{441} = ?^2$
$15 + 21 = ?^2$
$?^2 = 36$
$? = 6$

67. (a); $16 \times 8 - ? = 2^6$
$128 - 64 = ?$
$? = 64$

68. (b); $16 \times 54 \div 36 + 6 = ?$
$? = 16 \times \frac{54}{36} + 6 = 30$

69. (e); $? = \sqrt{6 \times 3 \times 5 + 50\%\ of\ 620}$
$? = \sqrt{90 + 310} = \sqrt{400} = 20$

70. (c); $6^2 = \frac{18\times8 - ?\times2}{3}$
$36 \times 3 = 144 - ? \times 2$
$? \times 2 = 144 - 108$
$? = \frac{36}{2} = 18$

71. (c); Marks scored by Sandy in English and Maths together = 60 + 60 = 120
Marks scored by Aditya and Neeraj in English together = 75 + 85 = 160
Required % = $\frac{120}{160} \times 100 = 75\%$

72. (a); Required ratio = $\frac{60+75+55+60}{80+60+95+65} = \frac{250}{300} = \frac{5}{6}$

73. (d); Total marks scored by Paul = 65 + 60 + 80 + 65 = 270
Total marks scored by Neeraj = 85 + 55 + 95 + 85 = 320
Required difference = 320 − 270 = 50

74. (e); Required average = $\frac{75+75+60}{3} = 70$

75. (b); $Required\ \% = \frac{60+60+65+60}{400} \times 100 = 61.25\%$

76. (b); MP of article = $\frac{1020}{80} \times 100$ = Rs. 1275
Selling price = 1275 – 199 = Rs. 1076

77. (c); Sum of present age of A, B and C
= 98 – 4 × 3
= 98 – 12
= 86 yr.
Present age of C = 86 – (32 + 23) = 31 yr.
Age of C four years hence = 31 + 4 = 35 yr.

78. (b); Profit share ratio of

A		B
$12000 \times x$		16000×9
x	:	12

ATQ,
$\frac{x}{12} = \frac{9000}{12000}$
$\Rightarrow x = 9$ months.

79. (e); Let, total quantity = 100ℓ
Quantity of milk = 60 ℓ
And quantity of water = 40 ℓ
ATQ,
$\frac{40}{100} = \frac{60}{100+x}$
2 (100 + x) = 5 × 60
200 + 2x = 300
2x = 100
x = 50 ℓ
$Water\ added\ in\ \% = \frac{50}{100} \times 100 = 50\%$

80. (e); $Let\ the\ sum\ be\ Rs.P.$
$P\left[\frac{11}{10} \times \frac{11}{10} - 1\right] - \frac{P \times 2 \times 8}{100} = 225$
$\Rightarrow P\left[\frac{21}{100}\right] - \frac{16P}{100} = 225$
$\Rightarrow P = \frac{225 \times 100}{5}$
$\Rightarrow P = Rs.4500$

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Part-IX

Mock 41

IBPS RRB Clerk Prelims 2017

REASONING ABILITY

Directions (1-5): In each of the question, relationships between some elements are shown in the statements(s). These statements are followed by conclusions numbered I and II. Read the statements and give the answer.
(a) If only conclusion I follows.
(b) If only conclusion II follows.
(c) If either conclusion I or II follows.
(d) If neither conclusion I nor II follows.
(e) If both conclusions I and II follow.

1. **Statements:** A < B >N = M, B ≤ V, M > R
Conclusions: I. B > R **II.** V > A

2. **Statements:** D <E >F = G > H = I ≤ J
Conclusions: I. F > I **II.** J ≥ E

3. **Statements:** M < N < O > P, N<E
Conclusions: I. E < M **II.** E>O

4. **Statements:** C ≥ D< E = F ≥ G, C < W
Conclusions: I. E =G **II.** G< E

5. **Statements:** R < T < S < P > Q, R> X
Conclusions: I. S < Q **II.** X < S

Direction (6-10): Study the following information carefully and answer the question given below-
Eight people viz. G, H, I, J, K, L, M and N lives in a Building on different floors from top to bottom (such as ground floor numbered as 1 and top is numbered as 8) but not necessarily in the same order.
There is a gap of three floors between J and L and both of them lives on odd number of floor. N lives just above H, who lives on even numbered floor. I lives on floor number 6.Only one person lives between L and M. J lives above I. Three persons live between K and H.

6. Who among the following lives on ground floor?
(a) N (b) J (c) K
(d) M (e) None of these

7. Who among the following lives immediately below L?
(a) K (b) I (c) G
(d) H (e) None of these

8. How many persons lives between I and H?
(a) One (b) Three (c) Fives
(d) Two (e) None of these

9. Who among the following lives on Top floor?
(a) N (b) J (c) K
(d) M (e) None of these

10. Which of the following combination is false?
(a) J-7 (b) L-3 (c) G-2
(d) H-4 (e) N-1

11. In a row of children facing North, Rajan is twelfth from the right end and is fifth to the right of Satyarthi who is tenth from the left end. How many total number of children are there in the row?
(a) 29 (b) 28 (c) 26
(d) 27 (e) None of these

12. Raj leaves his home and goes straight 20 meters, then turns right and goes 10 meters. He turns left and goes 30 meters and finally turns right and starts walking. If he is now moving in the north direction, then in which direction did he start his walking?
(a) East (b) West (c) North
(d) South (e) None of these

Directions (13-17): In each of the questions given below, a group of digits/letter is given followed by four combinations of symbols numbered (a), (b), (c) and (d). You have to find out which of the four combinations correctly represents the group of digits/letters based on the symbol codes and the conditions given below. If none of the four combinations represents the group of digits correctly, give (e) ie 'None of these' as the answer.

Digit	Z	L	F	1	I	5	7	A	E	B	2	X	6	W
Symbol	@	!	$	^	µ	Δ	Å	&	>	≠	<	®	£	∞

Condition for coding the group elements:
(i) If the first letter is Vowel and the last digit is divisible by 2, then both are to be coded as +.
(ii) If the first as well as the last digit is odd, then both are to be coded by the code of the first digit.
(iii) If the first letter is consonant and the last digit is odd number, then the code of first and last elements are to be interchanged.

13. WX6ZF1
(a) ^®$@£∞ (b) ^@$∞<! (c) ^®£@$∞
(d) ∞®@>!< (e) None of these

14. FE1XI6
(a) ∞^@<!£ (b) $<^^£@ (c) $>^®µ£
(d) $<^@^£ (e) None of these

15. 5L2IA1
(a) Δ!<μ&Δ (b) Δ!&^<μ (c) Δ!<μ^&
(d) μ&Δ!<^ (e) None of these

16. E2ZA6
(a) &>!^@ (b) @<@&! (c) @&<@&
(d) +<@&+ (e) None of these

17. IZ2W2
(a) @≠^$& (b) +@<∞+ (c) <∞μ@≠
(d) @≠>!^ (e) None of these

Directions (18-22): Read the following information carefully and answer the questions given below.
A, B, C, D, E, F, G and H are eight members standing in a row (not necessarily in the same order) facing north.
C and B have as many members between them as G and C have between them. D, who is 4th from the extreme left end, is 2nd to the left of E. G is 3rd place away from one of the extreme end. Neither B nor C sits any extreme end. F sits immediate right of A.

18. How many persons sit between G and B?
(a) One (b) Three (c) Two
(d) Four (e) None of these

19. Who among the following persons sits at extreme ends?
(a) A, G (b) B, C (c) F, H
(d) H, A (e) None of these

20. Who sits second to the right of E?
(a) B (b) H (c) G
(d) C (e) None of these

21. Who sits third to the left of G?
(a) A (b) None (c) F
(d) E (e) B

22. Who sits immediate left of C?
(a) A (b) H (c) C
(d) D (e) None of these

23. Find the odd one out?
(a) ACB (b) DFE (c) GIH
(d) JLK (e) MNO

Directions (24-28): Study the following number sequence and answer the questions following it.
9 3 2 4 5 7 9 5 8 1 5 0 6 4 2 9 8 2 6 3 5 9 8 2 1 5 4 3 2 1

24. How many odd numbers are there in the numeric series which are immediately preceded by a number, which is a whole square?
(a) One
(b) Two
(c) Three
(d) More than three
(e) None of these

25. If all the odd numbers are dropped from the series, which number will be eighth to the left of eleventh number from the left end?
(a) 2 (b) 8 (c) 6
(d) 4 (e) None of these

26. If 1 is subtracted from all odd numbers and 2 is subtracted from all even numbers in the given number series, then which number will be sixteenth from the right end?
(a) 0 (b) 2 (c) 3
(d) 8 (e) 6

27. If the position of the 1st and the 16th numbers, the 2nd and the 17th numbers, and so on up to the 15th and the 30th numbers, are interchanged, which number will be 7th to the right of 19th number from the right end?
(a) 5 (b) 9 (c) 8
(d) 4 (e) None of these

28. How many total even numbers which is immediately preceded by a 'whole cube' or 'immediately preceded by a whole square' in the above sequence?
(a) Four (b) Five (c) Three
(d) Six (e) None of these

Directions (29–33): In each question below are given some statements followed by two conclusions numbered I and II. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows/follow from the given statements, disregarding commonly known facts. Give answer
(a)If only conclusion I follows.
(b)If only conclusion II follows.
(c) If either conclusion I or II follows.
(d)If neither conclusion I nor II follows.
(e)If both conclusions I and II follow.

29. Statements: All shirts are skirts.
No skirt is top. All tops are kurta.
Conclusions: I. All shirts are kurta
II. Some kurta are skirts.

30. Statements: Some chocolate are chips.
Some chips are jelly.
All jelly are whoppers.
Conclusions: **I.** Some jelly are chips.
II. All chocolate being whoppers is a possibility

31. Statements: Some frooti are Maaza.
No Maaza is slice.
All slice are fanta.
Conclusions: **I.** Some frooti are definitely not slice.
II. Some fanta are definitely not Maaza.

32. Statements: All carbon are oxygen.
All Nitrogen are carbon.
Some oxygen are Sulphur.
Conclusions **I.** All Nitrogen being Sulphur is a possibility.
II. All Nitrogen are not oxygen.

33. Statements: All September are October.
No October is November.
No November is December.
Conclusions: **I.** Some September are not Novembers
II. No October is December.

Directions (34-38): Following questions are based on the five words given below, Study the following words and answer the following questions.
NOW SAD WAF RAT CAT

(The new words formed after performing the mentioned operations may not necessarily be a meaningful English word.)

34. If the given words are arranged in the order as they appear in a dictionary from left to right, which of the following will be the fourth from the left end?
(a) WAF (b) NOW (c) SAD
(d) CAT (e) RAT

35. How many letters are there in the English alphabetical series between the second letter of the word which is second from the right end and the third letter of the word which is second from the left end?
(a) Two (b) Three (c) Four
(d) Five (e) None of these

36. If the third alphabet in each of the words is changed to the previous alphabet in the English alphabetical order, how many words thus formed will be without any vowels?
(a) None (b) One (c) Two
(d) Three (e) More than three

37. If the position of the first and the third alphabet of each of the words are interchanged, which of the following will form a meaningful word in the new arrangement?
(a) NOW (b) SAD (c) RAT
(d) WAF (e) Both (a) and (c)

38. If in each of the given words, each of the consonants is changed to its previous letter and each vowel is changed to its next letter in the English alphabetical series, then how many words thus formed will at least one vowel appear?
(a) None (b) One (c) Two
(d) Three (e) None of these

39. If in the number 9737132710, positions of the first and the second digits are interchanged, positions of the third and fourth digits are interchanged and so on till the positions of 9th and 10th digits are interchanged, then which digit will be 6th from the left end?
(a) 7 (b) 1 (c) 3
(d) 9 (e) None of these

40. How many pairs of letters are there in the word" WORSHIP" which have as many letters between them in the word as in alphabetical series?
(a) None (b) One (c) Two
(d) Three (e) Four

QUANTITATIVE APTITUDE

41. The retail price of a water geyser is Rs. 1265. If the manufacturer gains 10%, the wholesale dealer gains 15% and the retailer gains 25%, then the cost of the product is:
(a) Rs. 800 (b) Rs. 900 (c) Rs. 700
(d) Rs. 600 (e) None of these

42. A pipe can fill a cistern in 6 hrs. Due to a leak in its bottom, it is filled in 7 hrs. When the cistern is full, in how much time will it be emptied by the leak?
(a) 42 hrs (b) 40 hrs (c) 43 hrs
(d) 45 hrs (e) None of these

43. Ram travels a certain distance at 3 km/h and reaches 15 minutes late. If he travels at 4 km/h, he reaches 15 minutes earlier. The distance he has to travel is:
(a) 4.5 km (b) 6 km (c) 7.2 km
(d) 12 km (e) None of these

44. In a mixture of 45 litres, the ratio of milk and water is 3 : 2. How much water must be added to make the ratio 9 : 11?
(a) 10 litres (b) 15 litres (c) 17 litres
(d) 20 litres (e) None of these

45. A person can row with the stream at 8 Km per hour and against the stream at 6 Km an hour. The speed of the current is:
(a) 1 Km/h (b) 2 Km/h (c) 4 Km/h
(d) 5 Km/h (e) None of these

46. A father's age is three times the sum of the ages of his two children, but 20 years hence his age will be equal to the sum of their ages. Then, the father's age is:
(a) 30 years (b) 40 years (c) 35 years
(d) 45 years (e) None of these

47. A sum was put at simple interest at a certain rate for 3 years. Had it been put at 1% higher rate, it would have fetched Rs. 5100 more. The sum is:
(a) Rs. 170000 (b) Rs. 150000 (c) Rs. 125000
(d) Rs. 120000 (e) None of these

48. From among 36 teachers in a school, one principal and one vice-principal are to be appointed. In how many ways can this be done?
(a) 1260 (b) 1250 (c) 1240
(d) 1800 (e) None of these

49. A card is drawn at random from a well-shuffled pack of 52 cards. What is the probability of getting a two of hearts or a two diamonds?
(a) $\frac{3}{26}$ (b) $\frac{2}{17}$ (c) $\frac{1}{26}$
(d) $\frac{4}{13}$ (e) None of these

50. A sum is invested for 3 years at compound interest at 5%, 10% and 20% respectively. In three years, if the sum amounts to Rs. 16,632, then find the sum.
(a) Rs. 11000 (b) Rs. 12000 (c) Rs. 13000
(d) Rs. 14000 (e) None of these

Directions (51-55): Table shows the mobile phones sold on different days by different sellers. Read the table carefully and answer the questions.

Days→ / Mobiles Phones Sellers	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
P	40	45	48	28	50	24	20
Q	90	92	27	12	16	98	26
R	80	36	30	13	28	62	47
S	60	46	12	64	52	34	76
T	48	18	58	69	70	10	15

51. Find the difference of mobile phones sold by P and R together on Monday to the mobile phones sold by S and T on Wednesday ?
(a) 60 (b) 50 (c) 80
(d) 20 (e) None of these

52. Find the ratio of mobile phone sold by Q on Tuesday and Saturday together to the mobile phone sold by R on Thursday and Sunday together?
(a) 7 : 19 (b)19 : 5 (c)19 : 6
(d) 2 : 5 (e) None of these

53. Mobile phones sold by P and S together on Wednesday is what percent of mobile phone sold by T on Sunday ?
(a) 400% (b) 200% (c) 100%
(d) 50% (e) None of these

54. What is the average of mobile phone sold by Q on Wednesday, T on Sunday and S on Monday ?
(a) 24 (b) 36 (c) 30
(d) 28 (e) None of these

55. The mobiles sold by P on Thursday are of two types i.e. Windows phone and Android phone in ratio 3 : 4. Find the number of Windows phones sold by P on Thursday?
(a) 14 (b) 24 (c) 16
(d) 12 (e) None of these

Directions (Q.56-65): What should come in place of question mark (?) in following simplification problems?

56. 45% *of* 600+?% *of* 480 = 390
(a) 20 (b) 25 (c) 30
(d) 40 (e) None of these

57. $4\frac{2}{3} + 7\frac{1}{6} - 5\frac{2}{9} = ?$
(a) $6\frac{2}{3}$ (b) $6\frac{2}{9}$ (c) $6\frac{11}{18}$
(d) $6\frac{7}{18}$ (e) None of these

58. 65% *of* 240+ ?% *of* 150 = 210
(a) 45 (b) 46 (c) 32
(d) 36 (e) None of these

59. $\frac{2}{3}$ *of* $1\frac{2}{5}$ of 75% of 540 = ?
(a) 378 (b) 756 (c) 252
(d) 332 (e) None of these

60. 555.05 + 55.50 + 5.55 + 5 + 0.55 = ?
(a) 621.65 (b) 655.75 (c) 634.85
(d) 647.35 (e) None of these

61. 1425 + 8560 + 1680 ÷ 200 = ?
(a) 58.325 (b) 9973.4 (c) 56.425
(d) 9939.4 (e) None of these

62. ? % of 800 = 293 – 22% of 750
(a) 14 (b) 18 (c) 12
(d) 16 (e) 20

63. 25.6% of $250 + \sqrt{?} = 119$
(a) 4225 (b) 3025 (c) 2025
(d) 5625 (e) None of these

64. $4\frac{5}{6} - 5\frac{5}{9} = ? - 2\frac{1}{3} + \frac{11}{18}$
(a) $\frac{3}{4}$ (b) $2\frac{1}{18}$ (c) $1\frac{7}{9}$
(d) $1\frac{11}{18}$ (e) None of these

65. $[30\%\ of\ \{(80\%\ of\ 850) \div 34\}] = ?$
(a) 5 (b) 4 (c) 6
(d) 8 (e) 9

66. The sides of a triangle are in the ratio of $\frac{1}{2} : \frac{1}{3} : \frac{1}{4}$. If the perimeter is 52 cm, then the length of the smallest side is:
(a) 9 cm (b) 10 cm (c) 11 cm
(d) 12 cm (e) None of these

67. If A's salary is 25% higher than B's salary, then how much per cent is B's salary lower than A's?
(a) 15% (b) 20% (c) 25%
(d) $33\frac{1}{3}\%$ (e) None of these

68. Ravi sells an article at a gain of $12\frac{1}{2}\%$. If he had sold it at Rs. 22.50 more, he would have gained 25% The cost price of the article is:
(a) Rs. 162 (b) Rs. 140 (c) Rs. 196
(d) Rs. 180 (e) None of these

69. A certain job was assigned to a group of men to do it in 20 days. But 12 men did not turn up for the job and the remaining men did the job in 32 days. The original number of men in the group was:
(a) 32 (b) 34 (c) 36
(d) 40 (e) None of these

70. A vessel contains liquid P and Q in the ratio 5 : 3. If 16 litres of the mixture are removed and the same quantity of liquid Q is added, the ratio become 3 : 5. What quantity does the vessel hold?
(a) 35 litres (b) 45 litres (c) 40 litres
(d) 50 litres (e) None of these

Directions (Q.71-75): What should come in place of question mark (?) in following simplification problems?

71. $50\%\ of\ 250 + \sqrt{?} = 165$
(a) 1700 (b) 1600 (c) 1800
(d) 2000 (e) None of these

72. $140\%\ of\ 56 + 56\%\ of\ 140 = ?$
(a) 78.4 (b) 158.6 (c) 156.6
(d) 87.4 (e) None of these

73. $1\frac{1}{4} + 1\frac{5}{9} \times 1\frac{5}{8} \div 6\frac{1}{2} = ?$
(a) 17 (b) 27 (c) 42
(d) 18 (e) None of these

74. $999.09 + 99.90 + 9.99 + 9 + 0.99 = ?$
(a) 1118.97 (b) 1128.97 (c) 1218.97
(d) 1139.97 (e) None of these

75. $20\%\ of\ [\{(220\%\ of\ 40) - 10\}]\%\ of\ 500 = ?$
(a) 58 (b) 68 (c) 98
(d) 78 (e) None of these

Directions (Q.76-80): What should come in place of question mark (?) in following number series ?

76. 5, 8, 12, 18, 27, ?
(a) 39 (b) 40 (c) 41
(d) 42 (e) 43

77. 2, 10, 30, 68, 130, ?
(a) 210 (b) 215 (c) 222
(d) 228 (e) 235

78. 142, 133, 115, 88, ?
(a) 50 (b) 53 (c) 55
(d) 51 (e) 52

79. 3, 8, 18, 38, 78, ?
(a) 158 (b) 154 (c) 150
(d) 162 (e) 166

80. 6, 3, 3, 6, 24, ?
(a) 184 (b) 186 (c) 188
(d) 190 (e) 192

Solutions

REASONING ABILITY

1. (e); I. B > R (True) II. V > A (True)

2. (a); I. F > I (True) II. J ≥ E (False)

3. (d); I. E < M (False) II. E>O (False)

4. (c); I. E =G (False) II. G< E (False)

5. (b); I. S < Q (False) II. X < S (True)

Direction (6-10):

Floors	Persons
8	K
7	J
6	I
5	N
4	H
3	L
2	G
1	M

6. (d); **7. (c);** **8. (a);**

9. (c); **10. (e);**

11. (c); Sathyarthi's position from left end = 10th
Sathyarthi's position from right end = 17th
Total number of children in the row
= 10 + 17 – 1 = 26

12. (b); Raj started walking towards west.

13. (c); By using condition (iii) the code of WX6ZF1 will be ^®£@$∞.

14. (c); The code of FE1XI6 will be $>^®µ£.

15. (a); By using condition (ii) the code of 5L2IA1 will be Δ!<µ&Δ.

16. (d); By using condition (i) the code of E2ZA6 will be +<@&+.

17. (b); By using condition (i) the code of IZ2W2 will be +@<∞+.

Direction (18-22):

18. (b); **19. (d);** **20. (b);**

21. (b); **22. (d);**

23. (e);

1 3 2	4 6 5	7 9 8	10 12 11	13 14 15
ACB	DFE	GIH	JLK	MNO

So, the odd one out will be MNO.

24. (d); More than three

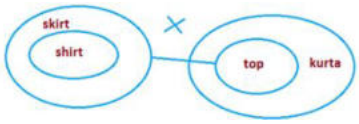
25. (b); 8

26. (a); 0

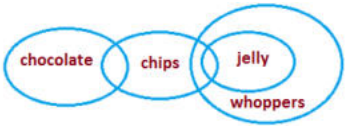
27. (d); 4

28. (b); Five

29. (d);

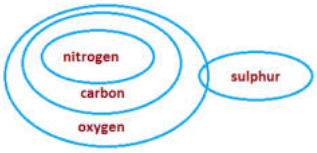


30. (e);



31. (e);

32. (a);



33. (a);

34. (c); SAD

35. (a); TWO

36. (a); None

37. (e); WON, TAR

38. (b); One

39. (b); 1

40. (d); Three- RS, HI, and PS

QUANTITATIVE APTITUDE

41. (a); Cost price = $\frac{100}{110}\times\frac{100}{115}\times\frac{100}{125}\times 1265$=Rs. 800

42. (a); In one hour, $\frac{1}{6}$ of the cistern can be filled
In one hour, only $\frac{1}{7}$ of the cistern can be filled due to leak in its bottom
∴ In one hour $\frac{1}{6}-\frac{1}{7}=\frac{1}{42}$ of the cistern is empty
∴ The whole cistern will be emptied in 42 hrs

43. (b); Let D be the required distance
So, $\frac{D}{3}-\frac{D}{4}=\frac{15+15}{60}$
Or, D = 6 km

44. (b); Let, M = 3K, W = 2K
∴ 3K + 2K = 45 ⇒ K = 9
⇒ Milk = 27 litres and water = 18 litres
Now suppose x litres of water is added to the mixture such that
$\frac{27}{18+x}=\frac{9}{11}\Rightarrow 162+9x=297$
$\Rightarrow 9x=135\Rightarrow x=15$

45. (a); Let the speed of the current be x Km/h and speed of the person in still water be y km/h.
∴ y + x = 8
y – x = 6
⇒ y = 7, x = 1
∴ Speed of the current = 1 Km/h.

46. (a); Let the father's age be x years and age of his children be a and b years

$\therefore (a+b) = \frac{x}{3}$

And $(a+b) + 20 + 20 = x + 20$

$\Rightarrow \frac{x}{3} + 20 = x$

$\Rightarrow x = 30$ years

47. (a); Simple interest for 1 year $= \frac{5100}{3} = Rs\ 1700$

1% of sum = 1700

$\therefore$ sum $= \frac{1700\times100}{1} = Rs\ 170000$

48. (a); One principal can be appointed in 36 days

One vice-principal appointed in remaining 35 ways

$\therefore$ Total no. of ways = 36 × 35 = 1260.

49. (b); $\therefore$ Required probability

$= \frac{^{13}C_2 + {}^{13}C_2}{^{52}C_2}$

$= \frac{78+78}{1326} = \frac{156}{1326} = \frac{2}{17}$

Alternately,

Required probability

$= \frac{13}{52}\times\frac{12}{51} + \frac{13}{52}\times\frac{12}{51}$

$= 2 \times \frac{13}{52}\times\frac{12}{51} = \frac{2}{17}$

50. (b); Let, P be the sum.

$\therefore 16632 = P\left(1+\frac{5}{100}\right)\left(1+\frac{10}{100}\right)\left(1+\frac{20}{100}\right)$

Or, $16632 = P \times \frac{21}{20}\times\frac{11}{10}\times\frac{6}{5}$

Or, P = Rs.12,000

51. (b); Required difference = (40 + 80) – (12 + 58)

= 120 – 70 = 50

52. (c); $Required\ ratio = \frac{92+98}{13+47} = \frac{190}{60} = 19:6.$

53. (a); $Required\ percentage = \frac{48+12}{15}\times 100 = \frac{60}{15}\times 100 = 400\%$

54. (e); $Average = \frac{27+15+60}{3} = \frac{102}{3} = 34.$

55. (d); Windows phones sold by P on Thursday

$= \frac{3}{7}\times 28 = 12$

56. (b); $\frac{45}{100}\ of\ 600 + \frac{?}{100}\ of\ 480 = 390$

$\Rightarrow 270 + 4.8 \times ? = 390$

$\therefore ? = \frac{390-270}{4.8} = 25$

57. (c); $? = \frac{14}{3} + \frac{43}{6} - \frac{47}{9} = \frac{84+129-94}{18} = \frac{119}{18} = 6\frac{11}{18}$

58. (d); $\frac{65}{100}\ of\ 240 + \frac{?}{100}\ of\ 150 = 210$

$\Rightarrow 156 + 1.5 \times ? = 210$

$\therefore ? = \frac{210-156}{1.5} = 36$

59. (a); $? = \frac{2}{3}\ of\ \frac{7}{5}\ of\ \frac{75}{100}\ of\ 540 = 7 \times 54 = 378$

60. (a); $? = 555.05 + 55.50 + 5.55 + 5 + 0.55$

$= 621.65$

61. (e); $? = 1425 + 8560 + 1680 \div 200$

$= 1425 + 8560 + \frac{1680}{200}$

$= 9985 + 8.4 = 9993.4$

62. (d); $\frac{800\times?}{100} = 293 - \frac{750\times22}{100}$

$\Rightarrow 8 \times ? = 293 - 165 = 128$

$\Rightarrow ? = \frac{128}{8} = 16$

63. (b); $250 \times \frac{25.6}{100} + \sqrt{?} = 119$

$\Rightarrow 64 + \sqrt{?} = 119$

$\Rightarrow \sqrt{?} = 119 - 64 = 55$

$\Rightarrow ? = 55 \times 55 = 3025$

64. (e); $4 + \frac{5}{6} - 5 - \frac{5}{9} = ? - 2 - \frac{1}{3} + \frac{11}{18}$

$\Rightarrow ? = 4 - 5 + 2 + \left(\frac{5}{6} - \frac{5}{9} + \frac{1}{3} - \frac{11}{18}\right)$

$\Rightarrow 1 + \left(\frac{15-10+6-11}{18}\right) = 1 + 0 = 1$

65. (c); $? = \left[\frac{30}{100}\times\left\{\left(\frac{80}{100}\times 850\right)\div 34\right\}\right]$

$= \left[\frac{30}{100}\times\{680\div 34\}\right]$

$= \left[\frac{30}{100}\times 20\right] = 6$

66. (d); Sides of a triangle are in ratio $\frac{1}{2}:\frac{1}{3}:\frac{1}{4}$, i.e.,

6 : 4 : 3.

Let the sides be 6K, 4K and 3K, respectively.

$\therefore$ 13K = 52 $\Rightarrow$ K = 4

$\therefore$ Sides of the triangle are 24 cm, 16 cm and 12 cm, respectively.

67. (b); A = B + 25% of B

$\Rightarrow A = B + \frac{B}{4} = \frac{5B}{4}$

$\Rightarrow B = \frac{4}{5}A = A - \frac{1}{5}A = A - 20\%\ of\ A$

68. (d); $12\frac{1}{2}\% = Rs\ 22.50$

$\Rightarrow$ C.P. = Rs 180.

69. (a); Suppose x = original number of men in the group

$\therefore$ (x- 12) men did the job in 32 days

$\therefore$ 20x = 32(x – 12)

i.e., x = 32

70. (c); Let, the quantity of liquid P and Q be 5x and 3x litres respectively.

Quantity of P removed $= \frac{5}{5+3}\times 16 = 10$ litres

Quantity of Q removed $= \frac{3}{5+3}\times 16 = 6$ litres

Now, $\frac{5x-10}{3x-6+16} = \frac{3}{5}$

$\Rightarrow 25x - 50 = 9x + 30$

$\Rightarrow 16x = 80 \Rightarrow x = 5$

$\therefore$ Quantity that vessel hold = 8 ×5 = 40 litres

71. (b); $\frac{50}{100} of\ 250 + \sqrt{?} = 165$

$\Rightarrow 125 + \sqrt{?} = 165$

$\Rightarrow \sqrt{?} = 40$

$\therefore ? = (40)^2 = 1600$

72. (e); $\frac{140}{100} of\ 56 + \frac{56}{100} of\ 140$

= 78.4 + 78.4 = 156.8

73. (e); $? = 1\frac{1}{4} + 1\frac{5}{9} \times 1\frac{5}{8} \div 6\frac{1}{2} = \frac{5}{4} + \frac{14}{9} \times \frac{13}{8} \div \frac{13}{2}$

$= \frac{5}{4} + \frac{14}{9} \times \frac{13}{8} \times \frac{2}{13}$

$= \frac{5}{4} + \frac{7}{18} = \frac{45+14}{36} = \frac{59}{36} = 1\frac{23}{36}$

74. (a); 999.09 + 99.90 + 9.99 + 9 + 0.99

= 1118.97

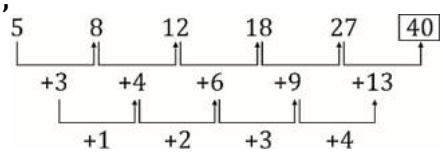
75. (d); $\frac{20}{100} \times \left[\left\{\left(\frac{220}{100} \times 40\right) - 10\right\}\right]\%\ of\ 500 = ?$

$\frac{1}{5} \times [\{88 - 10\}]\%\ of\ 500 = ?$

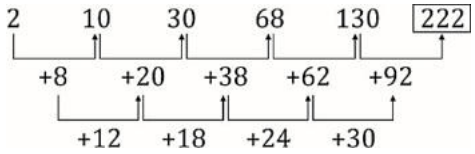
$\frac{1}{5} \times \frac{78}{100} \times 500 = ?$

$? = 78$

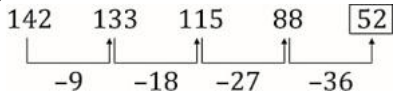
76. (b);



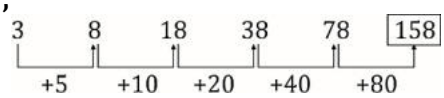
77. (c);



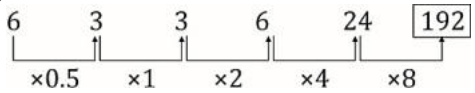
78. (e);



79. (a);



80. (e);



REASONING ABILITY

Directions (1-5): Study the following information carefully to answer these questions.
Eight friends A, B, C, D E, F G and H are sitting around a circle facing the centre. A sits third to the left of B, while second to the right of F. D does not sit next to A or B. C and G always sit next to each other. H never sits next to D and C does not sit next to B.

1. Which of the following pairs sits between H and E?
(a) F, D (b) H, B (c) C, G
(d) E, G (e) None of these

2. Starting from A's position, if all the eight were arranged in alphabetical order in clockwise direction the seating position of how many members (excluding A) not change?
(a) None (b) one (c) Two
(d) Three (e) None of these

3. Which of the following pairs has only one person sitting between them, if the counting is done in clockwise direction?
(a) A, B (b) C, D (c) F, E
(d) G, H (e) None of these

4. Who sits to the immediate right of E?
(a) A (b) D (c) F
(d) H (e) None of these

5. What is the position of B with respect to C?
(a) Second to the left (b) Third to the right
(c) Third to the left (d) Can't be determined
(e) None of these

Directions (6–10): Study the following information carefully and answer the questions given below.
Give answer-
(a) If only conclusion I is true
(b) If only conclusion II is true
(c) If either conclusion I or conclusion II is true
(d) If neither conclusion I nor conclusion II is true
(e) If both conclusions I and II are true

6. **Statements**
$H = W \leq R > F$
Conclusions
I. $R = H$
II. $R > H$

7. **Statements**
$M < T > K = D$
Conclusions
I. $D < T$ II. $K < M$

8. **Statements**
$R \leq N \geq F > B$
Conclusions
I. $F = R$ II. $B < N$

9. **Statements**
$H > W < M \geq K$
Conclusions
I. $K < W$ II. $H > M$

10. **Statements**
$R \geq T = M > D$
Conclusions
I. $D < T$ II. $R \geq M$

Directions (11-15): In each of the following below is given a group of letters followed by four combinations of digits/symbols. You have to find out which of the combinations correctly represents the group of letters based on the following coding system and mark the number of that combination as the answer. If none of the four combinations correctly represents the group of letters, mark (e), i.e. 'None of these', as the answer-

Letter	T	G	E	L	P	I	C	B	R	A	Q	M	U	H	J
Digit/Symbol	©	#	%	9	7	3	*	$	1	8	2	6	4	@	5

Conditions:
(i) If both the first and the last letter of the group are vowels, their codes are to be interchanged.
(ii) If the first letter is a consonant and the last letter is a vowel, both are to be coded as the code for the consonant.

11. ERHBMT
(a) %1@$6© (b) %1$@6© (c) ©1$@6©
(d) @%1$6© (e) None of these

12. PQGALE
(a) 72#89% (b) 72#897 (c) 72%#97
(d) 27#892 (e) None of these

13. EMTAHA
(a) 8©68@8 (b) 36©#83 (c) 86©8@3
(d) 86©8@% (e) None of these

14. BQRLHA
(a) 8219@$ (b) $219@8 (c) $219@$
(d) 82198@ (e) None of these

15. RGMALB
(a) 1#6891 (b) $#6891 (c) 16#89$
(d) $#689$ (e) None of these

Directions (16-20): In each question below are two/three statements followed by two conclusions I and II. You have to take the two/three given statements to be true even if they seem to be at given conclusions logically follows from the given statements disregarding commonly known facts.
Give answer-
(a) If only Conclusion I follows
(b) If only Conclusion II follows
(c) If either Conclusion I or II follows
(d) If neither Conclusion I nor II follows
(e)If both Conclusions I and II follow

16. **Statements:**
No tea is coffee.
No sweet is tea.
Conclusions:
I. No coffee is sweet.
II. All sweets are coffee.

17. **Statements:**
All medals are awards
All rewards are medals
Conclusions:
I. All rewards are awards.
II. All awards are medals.

18. **Statements:**
Some leaves are plants.
All bushes are plants.
Conclusions:
I. At least some leaves are bushes.
II. Some leaves are definitely not bushes.

19. **Statements:**
All bottles are mugs.
No cup is a mug.
Conclusions:
I. No bottle is a cup.
II. At least some mugs are bottles.

20. **Statements:** All windows are doors.
All entrances are windows.
No gate is a door.
Conclusions:
I. At least some windows are gates
II. No gate is an entrance

Directions (21-25): Study the following information carefully and answer the questions given below:
A, B, C, D, E, F and G are sitting in a straight line facing north, but not necessarily in the same order. There is only one person between F and C. E sits between A and D. There are only two persons between E and G. F sits on the immediate left of A, who sits in the middle of the row.

21. How many persons are there between E and F?
(a) One (b) Two
(c) Three (d) Can't be determined
(e) None of these

22. Who among the following sit at the extreme ends of the row?
(a) D, F (b) G, C
(c) B, C (d) Can't be determined
(e) None of these

23. Who among the following sits on the immediate right of D?
(a) G (b) E (c) F
(d) B (e) None of these

24. Who among the following sits third to the right of A?
(a) C (b) G (c) B
(d) E (e) None of these

25. Which of the following statements is true with regard to B?
(a) B is second to the right of A.
(b) B is fourth to the left of G.
(c) B sits at the extreme right end of the row.
(d) B sits at the extreme left end of the row.
(e) None of these

26. The positions of how many digits in the number 59164823 will remain unchanged after the digits are rearranged in descending order within the number?
(a) None (b) One (c) Two
(d) Three (e) More than three

27. What should come next in the following letter series based on English alphabet?
CEA IKG OQM ?
(a) STW (b) WUS (c) SWU
(d) UWS (e) None of these

28. In a row of 40 children facing North, E is eighth to the right of V. If V is 18th from the right end of the row, how far is E from the left end of the row?
(a) 32nd (b) 10th (c) 31st
(d) 29th (e) None of these

Direction (29-33): Following questions are based on the five three digit numbers given below
853 581 747 474 398

29. If all the digits in each of the numbers are arranged in descending order within the number, which of the following will form the lowest in the new arrangement of numbers?
(a) 853 (b) 581 (c) 747
(d) 398 (e) 474

30. If all the numbers are arranged in ascending order from left to right, which of the following will be the sum of all the three digits of the number which is exactly in the middle of the new arrangement?
(a) 17 (b) 15 (c) 14
(d) 13 (e) 19

31. What will be the resultant of third digit of the lowest number is multiplied with the second digit of the highest number?
(a) 27 (b) 40 (c) 20
(d) 45 (e) 19

32. If the positions of the second and the third digits of each of the numbers are interchanged, how many even numbers will be formed?
(a) None (b) One (c) Two
(d) Three (e) Four

33. If one is added to the first digit of each of the numbers, how many numbers thus formed will be divisible by three?
(a) None (b) One (c) Two
(d) Three (e) Four

34. In a certain code language JANUARY is written as ZSBTOBK. How is OCTOBER written in that code language?
(a) SFCPUDP (b) SFCNUDP (c) SCFNDUP
(d) FSCNUDP (e) None of these

Direction (35-37): Study the following information carefully to answer the given questions:
B is sister of A. A is father of G. H is the only son of F. F is only son-in-law of A. G is the mother of H.

35. If C is the husband of B, then how is A related to C?
(a) Father (b) Brother-in-law
(c) Mother (d) Brother
(e) None of these

36. How is G related to B?
(a) Brother (b) Niece (c) Sister
(d) Nephew (e) None of these

37. How is A related to H?
(a) Uncle
(b) Father
(c) Paternal grandfather
(d) Maternal grandfather
(e) None of these

Directions (38-39): Study the following information carefully to answer the questions.
A vehicle starts from point P and run 10 km towards North. It takes a right turn and runs 15 km. Now it runs 6 km after taking a left turn. Finally, it takes a left turn, runs 15 km and stops at point Q.

38. How far is point Q with respect to point P?
(a) 16 km (b) 25 km (c) 4 km
(d) 10 km (e) None of these

39. Towards which direction was the vehicle moving before it stopped at point Q?
(a) North (b) East (c) South
(d) West (e) North – West

40. In a row of 34 students, W is fifth after X from the front and X is 20th from the back. What is the position of W from the front?
(a) 20 (b) 25 (c) 30
(d) 22 (e) None of these

QUANTITATIVE APTITUDE

Directions (41-45): What will come in place of question mark (?) in the following questions?

41. 12 , 13 , 17 , 26, 42 , ?
(a) 67 (b)58 (c) 59
(d) 75 (e) none of these

42. 1, 2, 8, 48, 384 ?
(a) 3440 (b) 3840 (c) 3820
(d) 3550 (e) none of these

43. 157, 150, 136 ,115, 87 , ?
(a) 50 (b) 51 (c) 52
(d) 54 (e) none of these

44. 41472, 5184 , 576, 72, 8, ?
(a) 0 (b) 9 (c) 1
(d) 8 (e) none of these

45. 8 ,4, 4 ,6 ,12, ?
(a) 30 (b) 34 (c) 38
(d) 42 (e) none of these

Directions (46-60): What will come in place of question mark (?) in the following questions?

46. $\frac{3}{9} \times 2286 + \frac{2}{11} \times 1397 = ?$
(a) 916 (b) 1016 (c) 1216
(d) 1026 (e) 1256

47. $7802 + 132 - 8963 + 1326 = ? \times 33$
(a) 6 (b) 12 (c) 21
(d) 9 (e) 14

48. 21.9% of 650 = ? + 23.12
(a) 121.23 (b) 109.23 (c) 119.32
(d) 129.23 (e) 119.23

49. $6666 \div 66 \div 0.25 = ?$
(a) 101 (b) 404 (c) 304
(d) 40.4 (e) None of these

50. $\sqrt{?} + 18 = \sqrt{2704}$
(a) 1256 (b) 1156 (c) 1296
(d) 1024 (e) 1466

51. $2\frac{1}{7}+4\frac{3}{5}-3\frac{1}{7}+5\frac{1}{10}=?$
(a) $9\frac{7}{10}$ (b) $7\frac{7}{10}$ (c) $8\frac{7}{10}$
(d) $8\frac{4}{70}$ (e) None of these

52. $164\times43-6070=?$
(a) 682 (b) 792 (c) 882
(d) 1082 (e) 982

53. 14.5% of 740 – ?% of 320 = 87.3
(a) 6.75 (b) 6.25 (c) 12.5
(d) 14.75 (e) 8.25

54. $(27)^3\times3^4\div(81)^2=3^?$
(a) 2 (b) 5 (c) 4
(d) 3 (e) None of these

55. $\frac{3}{7}of\ 329+\frac{4}{11}of\ 2530=\sqrt{?}+894$
(a) 28899 (b) 29899 (c) 27789
(d) 27889 (e) None of these

56. 4376 + 3209 – 1784 + 97 = 3125 + ?
(a) 2713 (b) 2743 (c) 2773
(d) 2793 (e) 2737

57. $\sqrt{?}+14=\sqrt{2601}$
(a) 1521 (b) 1369 (c) 1225
(d) 961 (e) 1296

58. 85% of 420 + ?% of 1080 = 735
(a) 25 (b) 30 (c) 35
(d) 40 (e) 45

59. $\frac{7}{3}of\frac{5}{4}of\frac{1}{9}of\ 3024=?$
(a) 920 (b) 940 (c) 960
(d) 980 (e) 840

60. 30% of 1225 – 64% of 555 = ?
(a) 10.7 (b) 12.3 (c) 13.4
(d) 17.5 (e) None of these

Directions (61-65): Study the following table and answer the questions given below. Number of Tourist who visit different cities by different modes of transport.

Cities	Vehicle				
	Car	Train	Bus	Bike	By Air
Delhi	192	188	172	191	174
Mumbai	180	166	178	187	182
Chandigarh	156	194	163	181	148
Dehradun	132	185	142	170	148
Masuri	149	159	155	149	183
Jaipur	168	163	158	142	174

61. What are the average number of tourists who comes by Train?
(a) 190.5 (b) 188·5 (c) 175.83
(d) 137·5 (e) None of these

62. What is the difference between the total number of tourists who went to Mumbai and Masuri by all vehicle?
(a) 78 (b) 98 (c) 88
(d) 83 (e) None of these

63. What is the percent of tourist who went to Dehradun by train to the tourist who went to Chandigarh by Air?
(a) 125 (b) 145 (c) 137
(d)160 (e) None of these

64. What is the difference between the average number of tourist who went by Air to the average number of tourist who went by Bus?
(a) 7.58 (b) 9.97 (c) 6.83
(d) 2.30 (e) None of these

65. What is the respective ratio of the number of tourist went to Delhi by Car and who went to Mumbai by air?
(a) 35 : 83 (b) 45 : 71 (c) 96 : 91
(d) 32 : 7 (e) None of these

66. If the wheel of a bicycle makes 560 revolutions in travelling 1.1 km, what is its radius? (use π=22/7)
(a) 31.25 cm (b) 37.75 cm (c) 35.15 cm
(d) 11.25 cm (e) none of these

67. Elena's age after 15 years will be 5 times her age 5 years back, What is the present age of Elena?
(a) 10 (b) 37 (c) 35
(d) 11 (e) none of these

68. A man purchased a cow for Rs. 3000 and sold it the same day for Rs. 3600, allowing the buyer a credit of 2 years. If the rate of interest be 10% per annum, then the man has a gain of:
(a) 5% (b) 0% (c) 20%
(d) 10% (e) none of these

69. A man takes 3 hours 45 minutes to row a boat 15 km downstream of a river and 2 hours 30 minutes to cover a distance of 5 km upstream. Find the speed of the current.
(a) 1kmph (b) 3 kmph (c) 5 kmph
(d) 2 kmph (e) none of these

70. A cistern 6 m long and 4 m wide contains water up to a height of 1 m 25 cm. Find the total area of the wet surface.
(a) 42 m sqaure (b) 49 m sqaure
(c) 52 m sqaure (d) 64 m square
(e) none of these

71. In terms of percentage profit, which among following the best transaction.
(a) C.P. 36, Profit 17 (b) C.P. 50, Profit 24
(c) C.P. 40, Profit 19 (d) C.P. 60, Profit 29
(e) C.P. 30, Profit 11

72. The milk and water in two vessels A and B are in the ratio 4:3 and 2:3 respectively. In what ratio the liquids in both the vessels be mixed to obtain a new mixture in vessel C consisting half milk and half water?
(a) 8 : 3 (b) 7 : 5 (c) 4 : 3
(d) 2 : 3 (e) none of these

73. The average price of 10 books is Rs.12 while the average price of 8 of these books is Rs.11.75. Of the remaining two books, if the price of one book is 60% more than the price of the other, what is the price of each of these two books?
(a) Rs. 5, Rs.7.50 (b) Rs. 8, Rs. 12
(c) Rs. 10, Rs. 16 (d) Rs. 12, Rs. 14
(e) None of these

74. A fort has provisions for 60 days. If after 15 days 500 men strengthen them and the food lasts 40 days longer, how many men are there in the fort?
(a) 3500 (b) 4000 (c) 6000
(d) 8000 (e) None of these

75. If a commission of 10% is given by a truck dealer to a person on mark price of Truck then dealer gains 20%. If the commission is increased to 15% the percentage gain of dealer is ?
(a) 40/3 (b) 10 (c) 20
(d) 15 (e) None of these

76. If a cartoon containing a dozen of mirrors is dropped, which of the following cannot be ratio of broken mirrors to unbroken mirrors.
(a) 7:5 (b) 3:1 (c) 3:2
(d) 2:1 (e) can't be determine

77. A bag contains Rs 216 in the form of 1 Rs ,50 paisa &25 paisa coins in the ratio of 2:3:4.the numbers of 50 paisa coins is?
(a) 140 (b) 175 (c) 184
(d) 160 (e) 144

78. A is twice as fast as B & B is trice as fast as C. The journey covered by C in 42 min. Will be covered by B in ?
(a) 14 min (b) 4 min (c) 5 min
(d) 8 min (e) 6 min

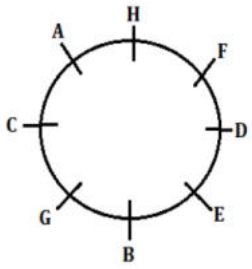
79. The CP of two dozen mangoes is Rs 32 , after selling 18 mangoes at 12 Rs per dozen ,the shopkeeper reduced the rate as Rs 4 per dozen. Then find the loss percentage ?
(a) 15 (b) 20 (c) 25
(d) 37.5 (e) None of these

80. How many kilograms of sugar costing Rs. 9 per kg must be mixed with 27kg of sugar costing Rs.7 per kg so that there may be gain of 10% by selling the mixture at Rs.9.24 per kg?
(a) 60 kg (b) 63 kg (c) 50 kg
(d) 77 kg (e) none of these

Solutions

REASONING ABILITY

Directions (1–5):



1. **(a);**
2. **(d);**
3. **(c);**
4. **(b);**
5. **(e);**

Directions (6–10):

6. **(c);** **I**. R ≥ W = H(False)
II. R ≥ W = H(False)

7. **(a);** **I**. D = K < T(True)
II. K < T > M(False)

8. **(b);** **I**. F ≤ N ≥ R(False)
II. B < F ≤ N(True)

9. **(d);** **I**. K ≤ M > W(False)
II. H > Q < M(False)

10. **(e);** **I**. D < M = T(True)
II. R ≥ T = M(True)

Direction (11-15):

11. **(a);** %1@$6©

12. **(b);** 72#897

13. **(d);** 86©8@%

14. **(c);** $219@$

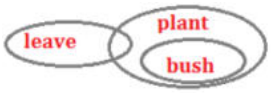
15. **(e);** 1#689$

Directions (16-20):

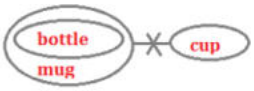
16. (d);

17. (a);

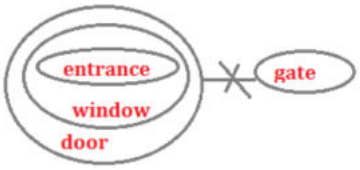
18. (c);



19. (e);



20. (b);



Directions (21-25):

21. (a);

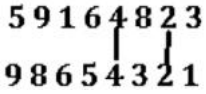
22. (c);

23. (d);

24. (c);

25. (c);

26. (c);



27. (d); UWS

28. (c); V is 18th from the left and E is 8th to the right of V so E is 30+1=31st from the left.

Direction (29-33):

29. (e); 474

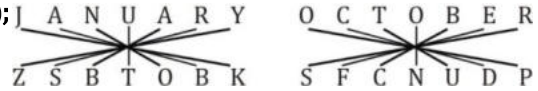
30. (c); (5+8+1) = 14

31. (b); 8*5=40

32. (c); Two

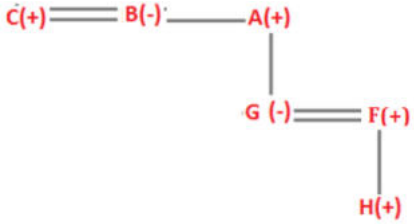
33. (c); Two

34. (b);

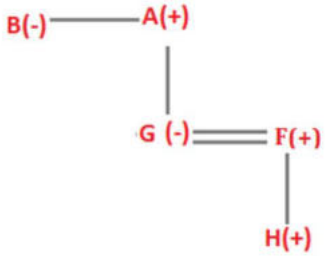


Direction (35-37):

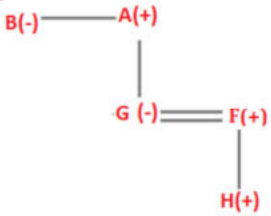
35. (b);



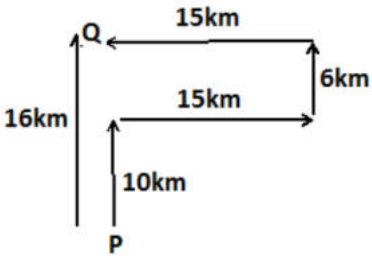
36. (b);



37. (d);



Directions (38-39):



38. (a);

39. (d);

40. (a); X is 20th from the back.
The position of w from the back is (20-5) = 15th
Hence the position of W from the front is (34-15+1) = 20th

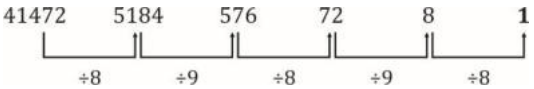
QUANTITATIVE APTITUDE

41. (a); The pattern is $+1^2, +2^2, +3^2$……42 + 25 = 67

42. (b); The pattern is ×2,×4,×6,×8 … … …384 × 10 = 3840

43. (c); The pattern is −7, −14, −21, −28 … … 87 − 35 = 52

44. (c);



45. (a); The pattern is ×0.5, ×1, ×1.5, ×2 … … 12×2.5 = 30

46. (b); 762 + 254 = 1016

47. (d); $9260 - 8963 = ? \times 33 \Rightarrow ? = \frac{297}{33} = 9$

48. (e); $142.35 = ? + 23.12 \Rightarrow ? = 119.23$

49. (b); $6666 \times \frac{1}{66} \times \frac{1}{0.25} = ? \quad ? = 404$

50. (b); $\sqrt{?} = 52 - 18$
$? = 1156$

51. (c); $(2 + 4 + 5 - 3) + \left(\frac{1}{7} + \frac{3}{5} + \frac{1}{10} - \frac{1}{7}\right)$
$= 8 + \frac{10+42+7-10}{70}$
$= 8 + \frac{49}{70} = 8\frac{49}{70} = 8\frac{7}{10}$

52. (e); 7052 – 6070 = ?
? = 982

53. (b); $107.3 - 87.3 = \frac{?}{100} \times 320$
$? = \frac{20\times100}{320} = 6.25$

54. (b); $\frac{(3^3)^3\times3^4}{(3^4)^2} = 3^?$
$? = 9 + 4 - 8 = 5$

55. (d); $141 + 920 = \sqrt{?} + 894$
$\sqrt{?} = 167 \Rightarrow ? = 27889$

56. (c); ?= 7682 – 4909 = 2773

57. (b); $\sqrt{?} = \sqrt{2601} - 14 = 51 - 14 = 37$
? = 1369

58. (c); $\frac{85}{100} \times 420 + \frac{?}{100} \times 1080 = 735$
$\Rightarrow ? = 35$

59. (d); 980

60. (b); ? = 367.5 – 355.2 = 12.3

61. (c); Average number of tourists which go by train
$= \frac{188+166+194+185+159+163}{6} = 175.83$

62. (b); Total tourist of Mumbai = 893
Total tourist of Masuri = 795
Difference = 98

63. (a); Required percentage $= \frac{185}{148} \times 100 = 125\%$

64. (c); Average of tourists who go by air = 168.16
Average of tourists who go by bus = 161.33
Required difference = 6.83

65. (c); Required ratio = 192 : 182 = 96 : 91

66. (a); Perimeter $= \frac{1.1\times1000}{560} m$
$2 \times \frac{22}{7} \times r = \frac{1.1\times100}{56}$
$r = \frac{110\times7}{56\times22\times2} = \frac{5}{16} m = 31.25$ cm

67. (a); Let Elena's age = x
x + 15 = 5 (x – 5)
x = 10 years

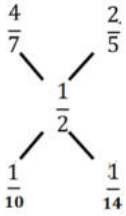
68. (b); Man's interest for 2 years $= \frac{3000\times2\times10}{100} = 600$
∴ After two years, the man will pay = 3000 + 600
= 3600 Rs.
So then is 0% gain

69. (a); Let downstream speed = x
Upstream speed = y
$\frac{15}{x} = 3\frac{45}{60} \Rightarrow \frac{15}{x} = \frac{15}{4} \Rightarrow x = 4$
$\frac{5}{y} = 2\frac{30}{60} \Rightarrow \frac{5}{y} = \frac{5}{2} \Rightarrow y = 2$
∴ Speed of current = 1 kmph

70. (b); Total Surface Area of wet surface
= 2 (l + b) × h + lb
= 2 (6 + 4) 1.25 + 6 × 4
= 20 × 1.25 + 24
= 25 + 24 = 49 m square

71. (d); Clearly from the options
Ans- option (d)

72. (b);



∴ Required Ratio $= \frac{14}{10} = 7 : 5$

73. (c); Sum of price of the remaining two
Books = 12 × 10 – 11.75 × 8 = 26
∴ Let cost of First book be x
∴ $x + \frac{160x}{100} = 26$
$\frac{260x}{100} = 26$
x = 10
∴ Price of second book = 10 + 6 = 16

74. (b); Let No. of soldiers = x

$60 \times x = 15x + 40\ (x + 500)$

$60x = 15x + 40x + 20000$

$5x = 20000$

$x = 4000$

75. (a); Let S.P. = 100

∴ After commission, price = 90

$\therefore CP = \frac{100}{120} \times 90 = 75$

Now, commission = 15%

$\therefore$ gain % $= \frac{85-75}{75} \times 100$

$= \frac{4}{3} \times 10 \Rightarrow \frac{40}{3}\%$

76. (c); Mirrors are multiple of 12

So expect 3 : 2 all the other ratios can be divided by 12

77. (e); $2x + \frac{3x}{2} + \frac{4x}{4} = 216$

$\frac{8x+6x+4x}{4} = 216$

$\frac{18x}{4} = 216 \Rightarrow x = 48$

∴ No of 50 paise coin = $48 \times 3 = 144$

78. (a);

A	B	C
$6x$	$3x$	x

Ratio of their speeds = 6 : 3 : 1

Ratio of their time $= \frac{1}{6} : \frac{1}{3} : \frac{1}{1} = 1 : 2 : 6$

$\therefore$ Time taken by B $= \frac{42}{6} \times 2 = 14$ min

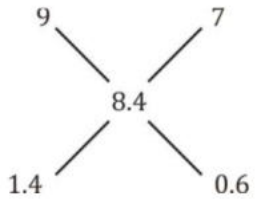
79. (d); Total CP = 32

Total SP = 12 + 6 + 2 = 20

$\therefore$ Loss percentage $= \frac{12}{32} \times 100 = 37.5\%$

80. (b); Mean price $= \frac{10}{110} \times 9.24$

$= 10 \times 0.84 = 8.4$



Ratio $= \frac{1.4}{0.6} = \frac{7}{3}$

$\therefore$ Required quantity $= \frac{27}{3} \times 7$

$= 63$ kg

REASONING ABILITY

Direction (1-5): Study the following information carefully and answer the questions given below:

Eight student P, Q, R, S, T, U, V and W sits in a circular table (all facing towards the center). Each of them like different colors i.e. Magenta, Blue, Pink, Yellow, Grey, Black, Brown and Violet. (Not necessary in the same order).

There are two persons gap between T and the one who likes Black. U sits immediate right of the one who likes Black color. There are two persons gap between U and the one who likes Blue color. Q faces the one who likes Blue color. W sits second to the right of the one who likes Blue. R likes Pink and faces the one who likes Brown. W does not like Black Color. The one who likes Violet sits next to T. Persons who like Magenta and Grey faces each other. U doesn't like Magenta. The one who likes Grey doesn't sit next to one who likes Violet. P likes Blue and sits third to the right of the one who likes Grey color. V sits third to the right of Brown and doesn't like Blue colour. P sits second to right of the one who likes Yellow Color.

1. Who among the following person sits immediate left of R?
(a) P (b) Q (c) S
(d) T (e) None of the above

2. Who among the following person sits at the immediate right of the one who likes Blue color?
(a) T
(b) The one who likes Magenta
(c) The one who likes Pink
(d) both (a) and (b)
(e) both (b) and (c)

3. Which among the following is true regarding Q?
(a) Q likes black
(b) Q sits next to T
(c) Q sits immediate left of S
(d) Q sits immediate right of T
(e) None is true

4. Four of the following five are alike in certain way based from a group, find the one which does not belong to that group?
(a) PT (b) TW (c) UV
(d) PR (e) VR

5. Who among the following person faces the one that likes Yellow colour?
(a) The person who like Blue
(b) The person who like Pink
(c) The person who like Grey
(d) The person who like Brown
(e) The person who like Violet

Direction (6-10): Study the following information carefully and answer the questions given below:

Nine teachers i.e. A, B, C, D, L, M, N, O and P have taken lecture on different dates- 7th, 10th and 15th of the month- March, June and December but not necessarily in the same order.

N has lecture on an even date in the month of having 30 days. Two persons have lecture in between N and O. B has lecture just before P but not in the same month. P does not take lecture before N. More than two persons take lecture between O and P. Both D and M have lectures in the same month. There is one person takes the lecture in between A and C. Not more than four persons have taken lectures in between C and D.

6. Who among the following persons take lectures in the month of December?
(a) L, D (b) P, M, C (c) P, D, M
(d) O, B (e) None of these

7. Who among the following person has taken a lecture just before O?
(a) L (b) A (c) D
(d) M (e) None of these

8. How many persons have lectures in between N and C?
(a) None (b) One (c) Two
(d) Three (e) None of these

9. Who among the following person definitely does not have lecture in March?
(a) O (b) P (c) A
(d) L (e) Both (b) and (d)

10. Four of the following five are alike in a certain way and hence they form a group. Which one of the following does not belong to that group?
(a) L (b) A (c) C
(d) M (e) D

Direction (11-15): Study the following information carefully and answer the questions given below:

In a certain code language:
"food safety is required" is coded as "dv sx wr gh"
"safety is very important" is coded as "wr tf gh qs"
"food is very good" is coded as "tf zx gh dv"

11. What is the code of "important" as per the given code language?
(a) wr (b) tf (c) gh
(d) qs (e) None of these

12. Which of the following word has code "zx" as per the given code language?
(a) food (b) is (c) good
(d) very (e) None of these

13. What is the code of "food is good" as per the given code language?
(a) wr zx gh (b) tf dv zx (c) gh zx dv
(d) qs dv gh (e) None of these

14. Which of the following words have code "tf qs dv" as per the gsiven code language?
(a) food is good
(b) safety is required
(c) safety is good
(d) very important food
(e) None of these

15. What may be the code of "road is important" as per the given code language?
(a) rv zx gh (b) tf rv zx (c) gh rv qs
(d) qs dv gh (e) gh qs tf

Direction (16-20): Study the following information carefully and answer the questions given below:

Nine persons viz. A, B, C, D, E, F, G, H and P are sitting in a row facing to the north direction but not necessarily in the same order. D sits 3rd to the left of F and one of them are sitting at the extreme end. There is one person sits between D and E. There are four persons sit between C and B, who sit near to E. Both G and A are immediate neighbors to each other. Both P and H are immediate neighbors to each other. There are more than two persons sit between P and G, who does not sit at any of the extreme end.

16. How many persons sit between B and G?
(a) None (b) One (c) Two
(d) Four (e) None of these

17. What is the position of F with respect to C?
(a) 3rd to the right
(b) 2nd to the right
(c) 2nd to the left
(d) 4th to the left
(e) None of these

18. Who among the following one sits at the extreme ends of the row?
(a) B (b) F (c) P
(d) H (e) None of these

19. How many persons sit between E and A?
(a) Two (b) One (c) None
(d) Four (e) None of these

20. Four of the following five are alike in a certain way and hence they form a group. Which one of the following does not belong to that group?
(a) D and E (b) A and F (c) P and C
(d) F and E (e) B and F

Direction (21-23): Study the following information carefully and answer the given questions.

In certain coding language, the directions are coded as per below conditions.
A@B means – A is North of B
A%B means – A is South of B
A#B means – A is East of B
A$B means – A is West of B
Example: A @ 14 B means A is north of B and the distance between A and B is 14m.
Condition: D#100C, E%120D, H#130E, A$120B, C@80B, G@150H, K@100F, K$70G

21. What is the direction of Point G with respect to Point E?
(a) North-east (b) South-east (c) North-west
(d) South-west (e) North

22. What is the total distance from Point C to Point H?
(a) 250m (b) 350m (c) 330m
(d) 300m (e) 220m

23. Four of the following five are alike in a certain way and hence they form a group. Which one of the following does not belong to that group?
(a) A-C (b) E-H (c) B-D
(d) F-G (e) D-K

Direction (24-28): Study the following information carefully and answer the questions given below:

There are nine boxes i.e. P, Q, R, S, T, U, V, W and X placed one above the another but not necessarily in the same order. Box P was placed just above the Box U. There are two boxes gap between Q and U. There are three boxes gap between T and S. There are three boxes gap between T and X. There is one box gap between R and Q. There are more than three boxes gap between P and R. The number of boxes above of W is one more than the number of boxes placed below V. There are more than three boxes gap between S and V. Box W was placed above V.

24. Which of the following box is placed just below S?
(a) W (b) P (c) Q
(d) V (e) R

25. How many boxes are placed between Q and X?
(a) One (b) Two (c) None
(d) Three (e) None of these

26. Which of the following box is placed in bottom most position?
(a) T (b) U (c) W
(d) X (e) V

27. Four of the following five are alike in a certain way and hence they form a group. Which one of the following does not belong to that group?
(a) S and U (b) W and Q (c) V and X
(d) R and X (e) U and T

28. If the positions of S and W are interchanged with each other, then find how many boxes are placed between Q and S?
(a) None (b) One (c) Two
(d) Four (e) More than five

Direction (29-31): Study the following information carefully and answer the questions given below:

A, B, C, D, E, F and G are students in same class and each of them having different heights. They are arranged according to their heights in decreasing order from left to right.

Only two students are shorter than C. F is taller than G and shorter than D. D is not the tallest. A is taller than E and shorter than B. G is taller than C. D's height is three times than A's height. E's height is 40cm which is 80% of A's height.

29. Who among the following student is shortest among all?
(a) A
(b) B
(c) E
(d) Either (a) or (c)
(e) None of these

30. What may be the possible height of F?
(a) 90cm (b) 80cm (c) 70cm
(d) 60cm (e) Can't be determined

31. How many students are taller than B?
(a) One (b) None (c) Two
(d) Three (e) Four

32. How many such numerals are there in the number '457891256' which will remain at the same position when arranged in descending order from left to right?
(a) None (b) One (c) Two
(d) Three (e) More than three

Direction (33-37): Study the following information carefully and answer the questions given below:

Seven people P, Q, R, S, T, U and V live on separate floors of a 7-floor building but not necessarily in the same order. Ground floor is as 1st floor, just above floor is as 2nd floor and so on until the topmost floor as 7th floor.

- There are more than three floors gap between P and S.
- Q lives just above the floor in which V lives.
- There is one floor gap between V and R.
- U lives below the P's floor but not just below.
- There is one floor gap between T and Q.
- V is neither lives just below nor just above the T's floor.
- The number of floors gap between Q and R is same as between T and V.
- There is more than one floor gap between U and S.

33. Who among the following person lives just above the T's floor?
(a) P (b) U (c) R
(d) S (e) None of these

34. Who among the following person lives on the ground floor?
(a) P (b) S (c) T
(d) R (e) U

35. Four of the following five are alike in a certain way and hence they form a group. Which one of the following does not belong to that group?
(a) R (b) Q (c) P
(d) V (e) U

36. How many floors gap is between P and Q?
(a) None (b) One (c) Two
(d) Three (e) More than Three

37. If P is interchanged his floor with U, then who among the following person lives just below the floor in which T lives?
(a) S (b) P (c) R
(d) U (e) None of these

Direction (38-40): In the following questions, the symbols #, @, * , % and © are used with the following meanings as illustrated below. Study the following information and answer the given questions:
P#Q – P is the son of Q.
P@Q – Q is the child of P.
P©Q – P is the parent of Q.
P*Q– P is the husband of Q.
P%Q– P is the wife of Q.

38. If Y @ B * Q © T % E, F @ B then how Y is related T?
(a) Grandfather (b) Grandson (c) Daughter
(d) Grandmother (e) Can't be determined

39. If H * M © O * N @ Z, the age of Z is 9 years and the age of H is 45 years then what is the probable age of N?
(a) 49 years (b) 21 years (c) 6 years
(d) 52 years (e) 68 years

40. If A @ C * D © E % G, then how E is related to A?
(a) Father
(b) Granddaughter
(c) Grandmother
(d) Daughter
(e) Can't be determined

QUANTITATIVE APTITUDE

41. Glass 'A' contains 400 ml sprite & glass 'B' contains 220 ml coke. 4X ml sprite taken out from 'A' and mixed in 'B' and then 3X ml mixture from 'B' taken out and poured into a vacant glass 'C'. If ratio of coke to sprite in glass C is 11 : 4, then find remaining quantity of sprite in glass 'B'?
(a) 240 ml (b) 60 ml (c) 64 ml
(d) 80 ml (e) 48 ml

42. Diameter of a cylinder is $\frac{2}{3}$ rd of sum of its radius & height, while ratio of curved surface area to volume of cylinder is 1 : 7. If radius and height of a cone is same as that of cylinder, then find slant height of cone?
(a) $21\sqrt{5}$ cm (b) $10\sqrt{5}$ cm (c) $7\sqrt{5}$ cm
(d) $14\sqrt{5}$ cm (e) $16\sqrt{5}$ cm

43. A, B & C invested their respective savings in a scheme, which offered CI at 20% p.a. for two years and received total interest of Rs. 1694. If A & C invested double of their respective saving in another scheme, which offered SI at 10% p.a. for two years and received total interest of Rs. 1100, then find difference between saving of A & C together & saving of B?
(a) 1250 Rs. (b) 1650 Rs. (c) 1150 Rs.
(d) 1050 Rs. (e) 750 Rs.

44. Cost price of a jeans is Rs. 200 more than cost price of a shirt. If shirt is sold at 20% loss and jeans is sold at 25% profit, then shopkeeper gets a total profit of $5\frac{5}{7}\%$ on selling a shirt and a jeans. Find the overall profit or loss (in %) of shopkeeper, if shirt is sold at 25% profit and jeans is sold at 20% loss?
(a) $\frac{5}{7}\%$ (b) $\frac{4}{7}\%$ (c) $\frac{3}{7}\%$
(d) $\frac{2}{7}\%$ (e) $\frac{6}{7}\%$

45. A bag contains 12 balls (Red & blue). Two balls are taken out randomly from the bag and probability of one ball being red and one ball being blue is $\frac{35}{66}$. If 'n' blue balls added in bag and then two balls are taken out randomly from bag, then minimum probability of remaining blue balls in bag is $\frac{9}{14}$, find 'n'? (blue balls are more than red balls in the bag initially).
(a) 1 (b) 2 (c) 4
(d) 6 (e) 8

Direction (46-50): Read the given information carefully and answer the following questions carefully.

There are 3 flight operators Air India, Indigo and Go Air offering services to two destinations from Delhi to Goa and Ooty. A total of 800 passengers travelled on these routes on a particular day of which 60% travelled to Ooty. Indigo because of its lowest fare always travel to its full capacity. All planes have 180 seating capacity each. Air India and Go Air issued same number of boarding passes. Passengers travelled to Ooty from Air India and Go Air are in ratio of 8:7.

46. The unoccupied capacity of Air India is what percent of total passengers to Ooty?
(a) $29\frac{1}{6}\%$ (b) $30\frac{1}{6}\%$ (c) $70\frac{5}{6}\%$
(d) $45\frac{5}{6}\%$ (e) $63\frac{7}{11}\%$

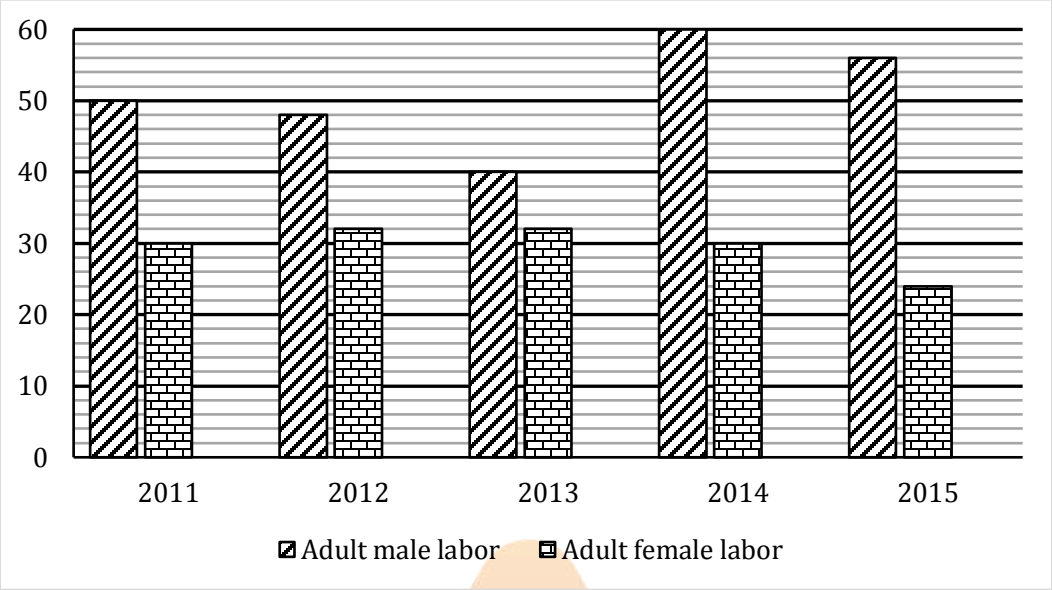
47. What is the average number of passengers travelled to Ooty from Air India and Indigo?
(a) 240 (b) 140 (c) 170
(d) 160 (e) 180

48. Which flight has maximum unoccupied seats?
(a) Indigo
(b) Air India
(c) Go Air
(d) Air India and Go Air both
(e) All have same no. of unoccupied seats

49. What is the ratio of passengers travelled to Ooty from Air India and Go Air together to the passengers travelled to Goa using Indigo and Go Air together?
(a) 3 : 2 (b) 15 : 13 (c) 17 : 13
(d) 15 : 7 (e) 1 : 1

50. Passengers travelling to Goa using Indigo are what percent more or less than passengers travelling to Ooty using Go Air? (approx.)
(a) 22 (b) 64 (c) 39
(d) 40 (e) 29

Direction (51 – 55): Bar graph given below shows percentage of labor (adult male labor & adult female labor) out of total labor working in a firm 'X' in five different years. Read the data carefully answer the questions.
Note – Total labor = (adult male labor + adult female labor + child labor)



51. If ratio of girls' child labor to boy's child labor working in the year 2013 is 3 : 4 and their difference is 48, then find the difference between adult male labor and adult female labor working in that year?
(a) 84 (b) 96 (c) 108
(d) 88 (e) 72

52. Total labor working in 2015 are 20% more than that of total labor working in 2011, then find total adult female labor working in 2015 is what percent more than total child labors working in 2011?
(a) 42% (b) 48% (c) 40%
(d) 36% (e) 44%

53. If ratio of adult male labors working in 2011 to 2012 is 5 : 4 and total labors working in these two years is 2200, then find total child labors working in these two years?
(a) 420 (b) 480 (c) 440
(d) 400 (e) 520

54. A child NGO inspection team in 2014 in the city inspected firm X and imposed fine on firm of Rs. 25 for each child labor. If inspection team imposed total Rs. 2000 on the firm and total child labor working in 2015 are 220 more than that of in 2014, then find ratio of adult male labors working in 2014 and 2015 respectively?
(a) 3 : 7 (b) 4 : 9 (c) 4 : 7
(d) 4 : 5 (e) 4 : 3

55. If ratio of total labors working in 2011, 2012 and 2013 is 8 : 10 : 5 and total adult female workers working in these three years is 720, then find total number of child labors working in these three years?
(a) 550 (b) 450 (c) 400
(d) 300 (e) 500

56. Amit's present age is 75% of Binny's present age where as present age of Chintu is $\frac{5}{8}th$ of Binny's present age. If difference between difference of Chintu and Binny age and difference of Binny and Amit age is 6 years then find the average of their age two years later?
(a) 44 years (b) 42 years (c) 36 years
(d) 40 years (e) 38 years

57. Speed of boat in still water is 37.5% less than the speed of the boat in downstream and boat covers 30 km in upstream in 5 hours, then find time taken by boat to cover 84 km in downstream?
(a) 3.5 hr (b) 3 hr (c) 4.5 hr
(d) 4 hr (e) 5 hr

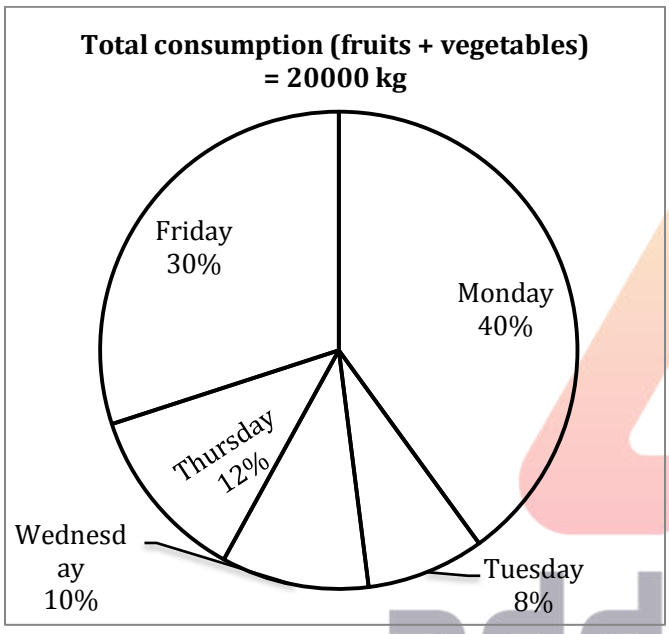
58. If we add 4 to the numerator of the fraction and increases denominator by 50% then both become equal. And when the numerator is increased by 5 and denominator is doubled then it becomes equal to the original fraction. What will be two times of that fraction?
(a) $\frac{4}{5}$ (b) $\frac{3}{2}$ (c) $\frac{8}{5}$
(d) $\frac{5}{2}$ (e) $\frac{5}{3}$

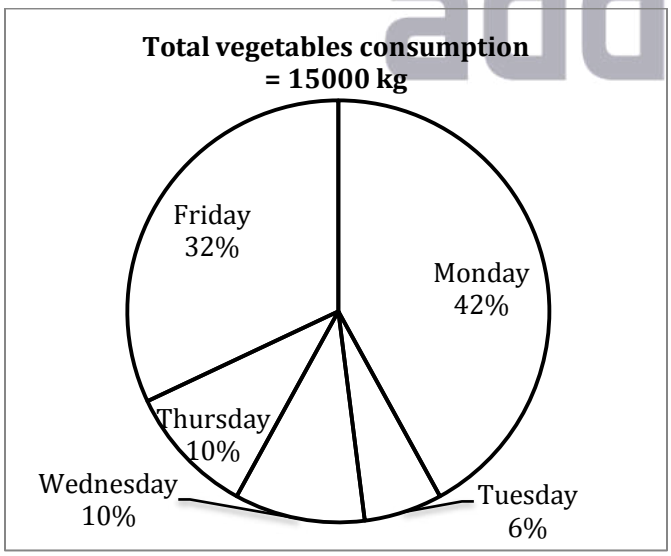
59. Efficiency of A is 40% more than that of B and ratio of efficiency of C to A is 6:7. Time taken by A and C together to complete the work is 18 days. Find the number of days taken by all of them working together to complete twice of the same work?
(a) 32 days (b) 24 days (c) 25 days
(d) 26 days (e) 27.5 days

60. Ravi cuts a square field of maximum possible area from his circular field. Find the area of the remaining circular field if the cost of grass cutting of the square field at Rs 4 per m^2 is Rs 882?
(a) 120 m^2 (b) 126 m^2 (c) 121 m^2
(d) 116 m^2 (e) 109 m^2

Directions (61-65): Study the pie charts given below and answer the following questions.

Pie charts shows the percentage distribution of total consumption (fruits + vegetables) on five different days of a week (Monday, Tuesday, Wednesday, Thursday and Friday) and percentage distribution of total vegetables consumption on these 5 days.





61. Fruits consumed on Monday and Tuesday together are what percent more or less than vegetables consumed on Wednesday and Thursday together?
(a) 20% (b) 50% (c) 80%
(d) 40% (e) 70%

62. If fruits consumed on Saturday are 50% more than that of consumed on Friday and ratio of fruits consumed to vegetables consumed on Saturday is 2 : 3, then find total fruits and vegetables consumed on Saturday.
(a) 3900 (b) 4800 (c) 4300
(d) 4500 (e) 4000

63. Fruits consumed on Wednesday and Thursday together are what percent of total fruits and vegetables consumed on these two days together?
(a) $34\frac{4}{11}\%$ (b) $31\frac{9}{11}\%$ (c) $41\frac{4}{11}\%$
(d) $39\frac{9}{11}\%$ (e) $43\frac{4}{11}\%$

64. The average of fruits consumed on Tuesday, Wednesday and Thursday are how much less than average of vegetables consumed on Monday and Friday?
(a) 4250 (b) 5050 (c) 4650
(d) 5450 (e) 4850

65. Vegetables consumed on Tuesday and Friday together are how much more or less than vegetables consumed on Wednesday and Thursday together?
(a) 2900 (b) 2200 (c) 2700
(d) 2500 (e) 1800

Directions (66-70): Study the passage given below and answer the following questions.

Data gives information about total crop production in a village in 2012, 2013, 2014, 2015 & 2016. Ratio of total crop production in 2012 to that of in 2013 is 13 : 20. Total crop production in 2015 is 10% less than that of in 2016 and total crop production in 2015 is equal to average of crop production in 2012 & 2014. Total crop production in 2014 is 60% more than that of in 2013. Average crop production in all these 5 years is 4500 tonnes.

66. Find total crop production in 2015 & 2016 together.
(a) 8000 tonnes (b) 9500 tonnes (c) 9000 tonnes
(d) 7500 tonnes (e) 8500 tonnes

67. If in 2013 village produced only three crops (wheat, rice and bajra) in the ratio 36 : 27 : 17 respectively, then find difference in production of wheat and production of bajra in the village in 2013.
(a) 850 tonnes (b) 1100 tonnes (c) 750 tonnes
(d) 500 tonnes (e) 950 tonnes

68. If village produced only wheat and bajra in 2012 in the ratio 8 : 5 and selling price (per ton) of wheat and bajra in 2012 is Rs.625 and Rs.500 respectively, then find total revenue of village in 2012.
(a) Rs.10,00,000 (b) Rs.25,00,000 (c) Rs.22,00,000
(d) Rs.15,00,000 (e) Rs.18,00,000

69. In 2016 & 2017 village produced only wheat & rice and ratio of production of wheat to that of rice in the village in 2016 & 2017 is 16 : 9 and 4 : 3 respectively. If production of wheat in village in 2017 is 400 tonnes more than that of in 2016, then find production of rice in the village in 2017 is what percent of that of in 2016?
(a) 120% (b) 150% (c) 160%
(d) 180% (e) 80%

70. Find ratio of total crop production in the village in 2013 to that of in 2014.
(a) 5 : 8 (b) 3 : 4 (c) 1 : 4
(d) 7 : 10 (e) None of the above.

Directions (71–75): In the given questions, two quantities are given one as 'Quantity I' and another as 'Quantity II'. You have to determine relationship between two quantities and choose the appropriate option.

71. **Quantity I:** A train can cross a pole in 24 sec with a speed of 75 km/h. Length of train.
Quantity II: A train can cross a pole in 12 sec and a tunnel in 55.2 sec. If length of tunnel is 1800 m. length of train.
(a) Quantity I > Quantity II
(b) Quantity I < Quantity II
(c) Quantity I ≥ Quantity II
(d) Quantity I = Quantity II or no relation
(e) Quantity I≤ Quantity II

72. **Quantity I:** Marked price of article, if article is marked at 50% above cost price and on selling the article, profit earned is 20% and S. P is Rs 1020.
Quantity II: Total cost of fencing a square of side 37.5 meter and cost of wire is Rs 0.17 per centimeter.
(a) Quantity I > Quantity II
(b) Quantity I < Quantity II
(c) Quantity I ≥ Quantity II
(d) Quantity I = Quantity II or no relation
(e) Quantity I≤ Quantity II

73. **Quantity I:** value of x
$(x+3)^2 = (x-3)^2 + x^2$
Quantity II: value of y
$y^2 - 29y + 204 = 0$
(a) Quantity I > Quantity II
(b) Quantity I < Quantity II
(c) Quantity I ≥ Quantity II
(d) Quantity I = Quantity II or no relation
(e) Quantity I≤ Quantity II

74. **Quantity I:** Amount obtained after two years on Rs. 2450 at $14\frac{2}{7}\%$ simple interest per annum.
Quantity II: Amount obtained after two years on investment of Rs 2450 at $12\frac{1}{2}\%$ $p.a.$ compounded yearly.
(a) Quantity I > Quantity II
(b) Quantity I < Quantity II
(c) Quantity I ≥ Quantity II
(d) Quantity I = Quantity II or no relation
(e) Quantity I≤ Quantity II

75. **Quantity I:** Actual discount percent. If a shopkeeper gives 1 article free at every purchase of 4 articles and also give 20% discount.
Quantity II: Final new profit percent. If selling price is increased by $14\frac{2}{7}\%$ then profit percent becomes $\frac{36}{19}$ of initial profit percent.
(a) Quantity I > Quantity II
(b) Quantity I < Quantity II
(c) Quantity I ≥ Quantity II
(d) Quantity I = Quantity II or no relation
(e) Quantity I ≤ Quantity II

76. Cost price of article A is Rs 600 more than that of B and selling price of A is Rs 1200 more than that of B. If difference between profit earned on selling these two articles is $13\frac{1}{3}\%$ of the cost price of A then find profit earned on B if profit % earned on A is $33\frac{1}{3}\%$?
(a) Rs 800 (b) Rs 900 (c) Rs 840
(d) Rs 960 (e) Rs 1000

77. In 100 lit mixture of milk and water, milk is 68 lit more than that of water. When 'a' lit of milk is taken out and (a+15) lit of water is added, milk becomes 50% more than that of water. Find value of 'a'?
(a) 20 (b) 15 (c) 18
(d) 12 (e) 16

78. Investment of Sumit is 25% more than that of Maanik and that of Ravi is Rs 8000 in that business. After 8 months, Sumit and Maanik have increased their amount by 20%,25% respectively and at the end of the year, profit share of Sumit and Ravi becomes equal then find the profit share percentage of Maanik?
(a) $28\frac{8}{9}\%$ (b) $28\frac{1}{3}\%$ (c) $27\frac{4}{9}\%$
(d) $33\frac{1}{3}\%$ (e) $26\frac{2}{3}\%$

79. Area of rectangle having length and breadth in the ratio of 4: 3 is 432 cm^2. A square whose side is equal to diagonal of rectangle then find ratio of numerical value of perimeter to the area of square?
(a) 7: 55 (b) 4: 35 (c) None of these
(d) 1:8 (e) 2:15

80. 180 m long Train A crosses Train B of 120 m in length which is running in opposite direction in $5\frac{5}{11}$ sec. If speed of train B is 20% more than that of train A, then find the time taken by both trains to cross each other, when they running in same direction?
(a) 60 sec (b) 58 sec (c) 55 sec
(d) 50sec (e) 65 sec

ENGLISH LANGUAGE

Directions (81-90): Read the following passage carefully and answer the questions given below them. Certain words are given in bold to help you locate them while answering some of the questions.

At the first monetary policy statement of the Reserve Bank of India (RBI) for 2018-19, it seems impossible to believe that the previous bi-monthly on 7 February marked a high point in the relationship between the Union finance ministry and the RBI. There was on that date a regulatory add-on of a 180-day window of **forbearance** for payment dues from small borrowers, and abolition of loan limits in the MSME (medium, small and micro enterprises) segment. Those initiatives followed the supportive measures for the small- scale sector in the Union budget on 1 February, through the corporate tax cut, and additional funding for the Micro-units Development Refinance Agency (Mudra).

The appearance of team play was shattered after the Punjab National Bank (PNB) fraud broke in mid- February. The PNB fraud has variously been placed as having been in operation since 2011, perhaps even earlier. Union finance minister Arun Jaitley, speaking at the Economic Times Global Business Summit on 23 February, blamed the top management and auditors of PNB, but was also quoted as having added: "Regulators ultimately decide the rules of the game and regulators have to have a third eye which is to be **perpetually** open. But unfortunately in the Indian system, **we politicians are accountable, the regulators are not.**"

RBI governor Urjit Patel came back forcefully on the occasion of a 14 March address at the Gujarat National Law University, pointing to the lack of ownership-neutrality in the Banking Regulation Act of 1949. The act as amended withholds the RBI from imposing certain types of penalties for errant conduct on public sector banks, like firing the chief executive officer, removing directors or **superseding** the board. The speech lists seven of them. Patel was right to have pointed them out, appropriately in an address to young entrants into the legal profession. That kind of unevenness in the regulatory landscape clearly has to be swept away.

The PNB fraud is said to have started rolling in 2011. As it happens, RBI that year appointed a high-level steering committee chaired by then deputy governor K.C. Chakraborty (a past chairman of PNB), to upgrade banking supervision to global best practices. Its report recommended that supervision be expanded in scope to go beyond a narrow focus on regulatory compliance or bank solvency, towards assessing the riskiness of a bank's operations, and its risk mitigation strategies. Independently, an inspection of select overseas branches of Indian banks was also conducted in May 2012, the previous one having been done in May 2008, but the findings are not publicly known.

The Chakraborty Committee report was submitted in June 2012. Its recommendations were accepted, and the supervisory system **overhauled** on to a new risk-based supervision (RBS) platform. Training was initiated for senior officers of the major banks. The new framework went into operation in 2013-14, renamed SPARC (supervisory programme for assessment of risk and capital). An initial set of 28 banks from across the ownership spectrum, accounting for 60% of total banking assets, was covered that year. PNB may well have been among them. Eight more banks were added over the next two years, and by 2016- 17, all scheduled commercial banks were covered. SPARC specifically calls for ongoing interaction between banks and supervisors, not just periodic inspections. Finally, there is a further overlay since 28 February 2017 of a standing committee on cyber security.

In a parallel development starting in 2012-13, memoranda of understanding (MoUs) were signed with 16 overseas regulators, which the annual report for that year says led to "substantial progress in supervisory information sharing and cooperation within jurisdictions where Indian banks are operating". By the close of reporting year 2016-17, the number of such MoUs had expanded to 40, and there was also a statement of cooperation with three US financial regulators. Since overseas jurisdictions were another point from which the PNB fraud could have been spotted, these agreements do not seem to have led to information exchange of any diagnostic value.

81. What benefits have been provided by the government to small borrowers?
(I) Allocation of additional funds.
(II) Abrogating the loan limits in the MSME segment.
(III) Government has extended the time period for small borrowers for payment of their dues.
(a) Only (I)
(b) Only (III)
(c) Both (II) and (III)
(d) Both (I) and (III)
(e) All are correct

82. What can be inferred from the statement, **"we politicians are accountable, the regulators are not."?**
(a) Only politicians need to take decisions for regulating the banks.
(b) RBI should not be held responsible for their ineffective regulation against frauds in PSU banks.
(c) In Indian system, politicians are made responsible for any type of fraudulent activity.
(d) Both (b) and (c)
(e) All are correct

83. Which type(s) of unevenness has/have been pointed out by RBI governor?
(a) appointment of high level supervision committee
(b) growing fraudulent activities and scams in banks.
(c) uncontrolled regulation in banks.
(d) imposing penalty on PSBs.
(e) All are correct

84. What are the efforts made by RBI to avoid the future loss in banks?
(I) turning towards privatization of banks.
(II) providing training to bank officials.
(III) updating supervisory system
(a) Only (I)
(b) Only (III)
(c) Both (II) and (III)
(d) Both (I) and (III)
(e) All are correct

85. Identify the tone of the author with respect to the passage.
(a) eulogistic (b) informal (c) nostalgic
(d) critical (e) didactic

86. According to the passage, the new framework SPARC includes
(I) to upgrade banking supervision to global standards.
(II) interaction between banks and supervisors.
(III) enhancing cyber security of scheduled commercial banks
(a) Only (I)
(b) Only (III)
(c) Both (II) and (III)
(d) Both (I) and (III)
(e) All are correct

Directions (87-88): Choose the word which is most similar in meaning to the word printed in bold in the context of the passage.

87. Perpetually
(a) abate (b) constantly (c) dissent
(d) harness (e) stride

88. Forbearance
(a) banish (b) cease (c) recuperate
(d) usurp (e) tolerance

Directions (89-90): Choose the word which is most opposite in meaning of the word printed in bold in the context of the passage.

89. Overhaul
(a) ensue (b) accede (c) acquiesce
(d) ruin (e) hapless

90. Supersede
(a) herald (b) confide (c) concede
(d) relinquish (e) retain

Directions (91-95): In each question, the word at the top of the table is used in four different ways, numbered (a) to (d). Choose the option in which the usage of the word is INCORRECT or INAPPROPRIATE. If it is used correctly in every sentence choose option (e) as your choice.

91. APPRAISE
(a) The President appropriately **appraised** Russell and Financial Times readers that he had already signed into law the National Peace and Reconciliation Commission Act.
(b) In cooperation with other professionals, social workers will **appraise** the individual's needs.
(c) He coolly **appraised** the situation, deciding which person would be most likely to succeed.
(d) This prompted many employers to **appraise** their selection and recruitment policies
(e) All are correct.

92. CREDULOUS
(a) Because my brother is a **credulous** consumer, he is a salesperson's dream.
(b) Even though there was very little evidence, the **credulous** jury decided the defendant was guilty.
(c) Reference **credulous** sources to strengthen your argument.
(d) Because the **credulous** public wanted to believe the killer was off the streets, they never questioned the arrest of an innocent man.
(e) All are correct.

93. FLAUNT
(a) While many people love to **flaunt** their possessions, I prefer people that keep a low profile.
(b) The orchestra decided to **flaunt** convention/ tradition and wear their everyday clothes for the concert.
(c) Donald Trump loves to **flaunt** his wealth and grandiose, whenever he has the chance.
(d) Flavio was **flaunting** his tan in a pair of white trunks.
(e) All are correct.

94. UNBEARABLE
(a) A delegation of councilors is lobbying the Government because they say the noise is **unbearable**.
(b) This argument is **unbearable** from an intellectual, moral and practical standpoint.
(c) All I remember of childbirth was the **unbearable** pain and the relief when it was all over.
(d) The grief she felt over Helen's death was almost **unbearable**.
(e) All are correct.

95. LUXURIANT
(a) We've bought a wonderfully **luxuriant** carpet for our bedroom.
(b) In addition to its inferior size, the coyote is also shorter in the leg than the wolf, and carries a more **luxuriant** coat of hair.
(c) This stretch of land was once covered with **luxuriant** forest, but is now bare.
(d) He took no leading part in the war against the English, his energies being largely occupied with the satisfaction of his artistic and **luxuriant** tastes.
(e) All are correct.

Directions (96-102): In each of the following questions, various sentences are given and you have to choose the one which has some or any grammatical error in it. In the questions where option (e) is all are correct and all the sentences are grammatically correct choose option (e) as the correct choice.

96. (a) The potassium found in potatoes is said to reduce cholesterol level, blood pressure and controls heart problems.
(b) The calcium and magnesium content in potatoes can help ease rheumatism.
(c) Health experts and nutritionists say that turnip juice has more Vitamin C than orange juice.
(d) To watch even a single plant grow from seedling to small and big with more leaves each day and find them flowering and giving fruits can give you happiness untold.
(e) All are correct.

97. (a) Everyone who desires to participate in the good to be obtained must share in the act.
(b) As we have seen above, all must participate that none may be in a position to reproach the rest.
(c) While Dean had no desire to participate in the new and perilous sport of ice climbing, he didn't share Cynthia total perplexity at why a sane human being would even consider subjecting himself or herself to such uncomfortable danger.
(d) They were dressed like the others, and seemed to participate in the general joy.
(e) He being the best student in the class, Gopal was chosen to participate in the competition.

98. (a) There is no end of 'paddies' along this river, and I'm sure they cannot understand your lingo.
(b) Knowledge of regional language is necessary for bank officers because they are to understand what their customers say.
(c) This was one point at which we touched, and which went far to enable me to understand him.
(d) Am I to understand that you have no intention of respecting my wishes in this matter?
(e) All are correct.

99. (a) Today he revealed the fact that he was angry on me because I had not helped him.
(b) There was but one person likely to know all Mr. Topsparkle's secrets, and he would be unlikely to reveal them.
(c) The study revealed the toxic effects of the pollutant.
(d) It was almost as if he were shutting Felipa off before she could reveal something.
(e) All are correct.

100. (a) I paused for a moment to have a full view of this notorious criminal.
(b) I know that several of my readers may remind me of Sir Boyle Roche, whose bulls have become not only notorious, but proverbial.
(c) The man who was blind with the right eye was a notorious criminal of this area.
(d) Many of the pretended magnetizers were notorious libertines, who took that opportunity of gratifying their passions.
(e) All are correct.

101. (a) He won't lose his mate, even if he chooses to kill her rather than give her up.
(b) Her skin began to flush until it was pink enough to look human rather than the sleep of the dead.
(c) Ordinarily when in difficulty Renu prefers keeping her counsel rather than going about here and there for advice.
(d) Maybe he'd rather listen than talk.
(e) All are correct.

102. (a) Only 6 crore out of 29 crore persons holding permanent account number (PAN) file income tax returns at present.
(b) Only three out of a thousand are born with this rare disease.
(c) So, with a snort and a neigh and a whisk of his short tail he trotted off the roof into the air and at once began floating downward to the street.
(d) The mark of these technologies is that they are greeted with universal skepticism at first.
(e) All are correct.

Directions (103-107): Given below are five sentences of a paragraph in a jumbled fashion. Arrange the sentences to form a coherent paragraph and answer the following questions.
(A) It plans to use this for the Chandrayaan-II moon mission in the early months of 2019.
(B) The multi-band, multi-beam satellite can cater to the communication needs of people in Jammu and Kashmir and the Northeast.
(C) With a liftoff mass of 640 tonnes, the GSLV MkIII is the heaviest launch vehicle made in India, and GSAT29 is the heaviest satellite to take off from Indian soil.

(D) The Geosynchronous Satellite Launch Vehicle MarkIII (GSLV Mk III) launched GSAT29, an advanced communications satellite, into a geosynchronous transfer orbit where the satellite's closest approach to earth would be 190 km and the farthest 35,975 km.
(E) The Indian Space Research Organization has marked a big milestone by successfully testing its heavy- lift launcher while launching an advanced communication satellite.

103. What should be the last sentence of the sequence?
(a) D (b) A (c) B
(d) C (e) E

104. What should be the SECOND sentence of the sequence?
(a) D (b) A (c) B
(d) C (e) E

105. What should be the FOURTH sentence of the final sequence?
(a) A (b) E (c) D
(d) B (e) C

106. What should be the THIRD sentence of the final sequence?
(a) D (b) A (c) C
(d) B (e) E

107. What should be the FIRST sentence of the final sequence?
(a) C (b) D (c) B
(d) E (e) A

Directions (108-110): In the following questions, a sentence is divided into four parts consisting of a highlighted word in each part. Choose the option reflecting the word which is either misspelt or grammatically incorrect. If all the highlighted words are correct, choose option (e) i.e. "all are correct" as your answer choice.

108. The **Monetry** Policy Committee / of India is a committee of the **Reserve** Bank of India/ that is **responsible** for fixing the / benchmark **interest** rate in India.
(a) Monetry (b) Reserve (c) Responsible
(d) Interest (e) All are correct

109. **Trade** wars can easily / lead to **confrontation**, which may / result in **impulsive / behviour** and misjudgment.
(a) Trade
(b) Confrontation
(c) Impulsive
(d) Behviour
(e) All are correct

110. Saudi Arabia **signalled** its discomfort / with the **faling** prices / and **hinted** at a fresh cut / of one million **barrels** a day.
(a) Signalled (b) Faling (c) Hinted
(d) Barrels (e) All are correct

Directions (111-120): In the following passage there are blanks, each of which has been numbered. These numbers are printed below the passage and against each, five options are given. Find out the appropriate word which fits into the blank appropriately.

The theory that authoritarian governments can _____ (111) _____ policy consensus more easily than multiparty democracies holds some ___(112) _____. Critical reforms in a country like India are often ____(113) _____ by the political conflict ____(114) _____ in the democratic process. But if that were the whole story, then all dictatorships would be economic powerhouses. The case of Asia's hyper-growth economies suggests what is important isn't _____(115)____ itself, but what policies the autocrat chooses to impose—and, more importantly, to whom he listens.
Historically, Asia's most successful strongmen have all benefited from _____ (116)____ sound economic guidance. In South Korea, long-serving ruler Park Chung-hee _____ (117) _____ that top economic posts be filled by highly _____(118) _____ economists and other professionals. As one study put it, "Though political agencies in the early Park regime were _____(119) _____ by the military, economic agencies generally were not. Rather, under Park the ____(120)____ of economics experts in the Korean government rose considerably."

111. (a) impose (b) deliver (c) give
(d) urge (e) demand

112. (a) fault (b) belief (c) merit
(d) payment (e) attraction

113. (a) enlightened (b) clasp (c) abet
(d) joined (e) stymied

114. (a) invested (b) engrained (c) chisel
(d) defined (e) erode

115. (a) autocracy (b) calamity (c) racism
(d) democracy (e)brutality

116. (a) commonly (b) remarkably (c) odd
(d) higher (e) violently

117. (a) endured (b) acquired (c) insisted
(d) pretended (e) argued

118. (a) amateurish (b) master (c) whole
(d) trained (e) expert

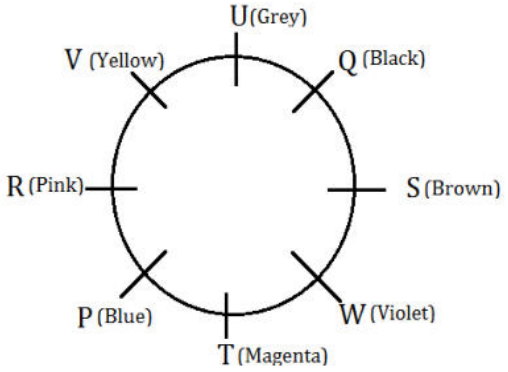
119. (a) followed (b) ordered (c) oppressed
(d) direct (e) dominated

120. (a) feature (b) report (c) status
(d) phase (e) place

Solutions

REASONING ABILITY

Solutions (1-5):



1. (e); 2. (d); 3. (a);

4. (d); 5. (e);

Solutions (6-10):

Months	Dates	Persons
March	7	A
	10	O
	15	C
June	7	L
	10	N
	15	B
December	7	P
	10	D
	15	M

6. (c); 7. (b); 8. (b);

9. (e); 10. (a);

Solutions (11-15):

Words	Codes
Safety	wr
Is	gh
Very	tf
Important	qs
Food	dv
Required	sx
Good	zx

11. (d); 12. (c); 13. (c);

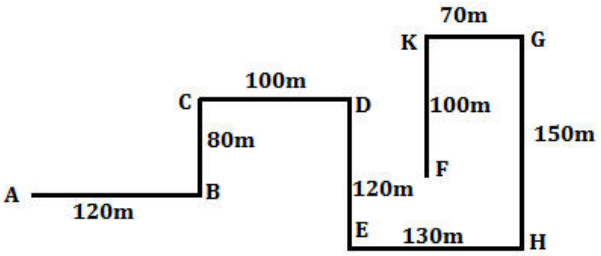
14. (d); 15. (c);

Solutions (16-20):

16. (c); 17. (e); 18. (c);

19. (a); 20. (d);

Solutions (21-23):



21. (a); 22. (b); 23. (b);

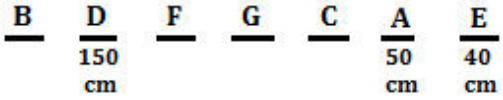
Solutions (24-28):

Boxes
S
P
U
W
T
Q
V
R
X

24. (b); 25. (b); 26. (d);

27. (d); 28. (b);

Solutions (29-31):



29. (c); 30. (e); 31. (b);

32. (b);

4 5 7 8 9 1 2 5 6
9 8 7 6 5 5 4 2 1

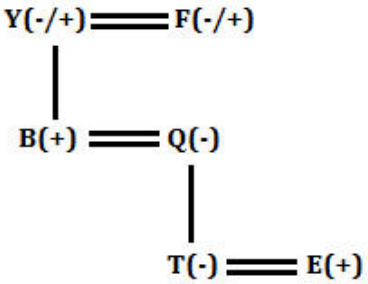
Solutions (33-37):

Floors	Persons
7	P
6	T
5	U
4	Q
3	V
2	S
1	R

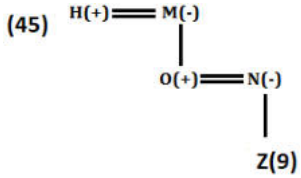
33. (a); **34. (d);** **35. (b);**

36. (c); **37. (b);**

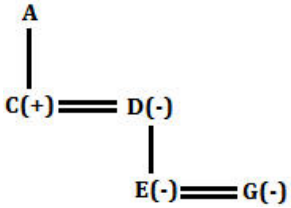
38. (e);



39. (b);



40. (b);



QUANTITATIVE APTITUDE

41. (c); Given, sprite taken out from glass 'A' = 4X ml
Total mixture in glass 'B' = (220 + 4X) ml
Ratio of coke to sprite in glass 'B' = $\frac{220}{4X} = \frac{55}{X}$
Now mixture taken out from glass 'B' and poured in glass 'C' = 3X ml
Given, ratio of coke to sprite in glass 'C' = 11 : 4
$\frac{3X}{55+X} \times 55 : \frac{3X}{55+X} \times X = 11 : 4$
$\frac{55}{X} = \frac{11}{4} \Rightarrow X = 20$ ml
Required quantity = $4 \times X - \frac{3X}{55+X} \times X$
$= 4 \times 20 - \frac{3\times20}{55+20} \times 20$
$= 80 - \frac{60}{75} \times 20 = 80 - 16 = 64$ ml

42. (d); Let radius of cylinder = r cm
And, let height of cylinder = h cm
ATQ –
$2r = \frac{2}{3}(r + h)$
$3r = r + h \Rightarrow h = 2r$
Curved surface area of cylinder = $2\pi rh$
And, volume of cylinder = $\pi r^2 h$
$\frac{2\pi rh}{\pi r^2 h} = \frac{1}{7} \Rightarrow r = 14$ cm
h = 28 cm
So, $l = \sqrt{r^2 + h^2}$
$l = \sqrt{14^2 + 28^2}$
$l = \sqrt{196 + 784} \Rightarrow l = \sqrt{980}$
$l = \sqrt{7 \times 7 \times 2 \times 2 \times 5} \Rightarrow l = 14\sqrt{5}$ cm

43. (b); Let saving of A, B & C be Rs.X, Rs. Y & Rs. Z respectively
ATQ –
Equivalent CI of two years at the rate of 20% = $20 + 20 + \frac{20\times20}{100} = 44\%$
$\frac{44}{100}(X + Y + Z) = 1694$
$X + Y + Z = 1694 \times \frac{100}{44}$
$X + Y + Z = 3850$ ---------- (i)
And, when A & C invested double of their respective saving –
$\frac{20}{100} \times (2X + 2Z) = 1100$
$X + Z = 2750$ --------- (ii)
Saving of B = 3850 – 2750 = 1100 Rs.
Required difference = 2750 – 1100 = 1650 Rs.

44. (a); Let cost price of shirt = X Rs.
So, cost price of jeans = (X + 200) Rs.
Selling price of shirt = $\frac{4X}{5} = 0.80X$ Rs.
Selling price of jeans = $(X + 200) \times \frac{5}{4}$
= (1.25x + 250) Rs.
ATQ –
$2X + 200 = (2.05X + 250) \times \frac{700}{740}$
$74X + 7400 = 71.75X + 8750$
$2.25X = 1350 \Rightarrow X = 600$ Rs.
Cost price of jeans = 800 Rs.
Now, SP of shirt when shirt sold at 25% profit
$= 600 \times \frac{125}{100} = 750$ Rs.
And, SP of jeans when jeans sold at 20% loss
$= 800 \times \frac{80}{100} = 640$ Rs.
Total selling price = 750 + 640 = 1390 Rs.
Required loss % = $\frac{1400-1390}{1400} \times 100 = \frac{10}{14}\% = \frac{5}{7}\%$

45. (c); Let total number of red balls = x
So, total number of blue balls = (12 – x)
ATQ –
$\frac{x(12-x)}{6\times11} = \frac{35}{66}$
$12x - x^2 = 35 \Rightarrow x^2 - 12x + 35 = 0$
$x(x - 5) - 7(x - 5) = 0 \Rightarrow x = 5$ & 7
Now new number of blue balls in bag = (7 + n)
Given, $\frac{(5+n)}{(10+n)} = \frac{9}{14}$
$70 + 14n = 90 + 9n \Rightarrow 5n = 20 \Rightarrow n = 4$

Solutions (46-50):
Total passengers = 800
(since, Indigo always travel fully occupied & each plane has 180 seats)
Passengers travelled to Ooty from Indigo = 180
Passengers travelled to Goa from Indigo = 180
Passengers travelling to Ooty = $\frac{60}{100}$ X 800 = 480
Passengers travelling to Goa = $\frac{40}{100}$ X 800 = 320
Air India and Go Air have issued same no. of boarding passes
Passengers using Air India = Passengers using Go Air
= $\frac{800-360}{2}$ = 220
Passengers travelled to Ooty using Air India
= $\frac{480-180}{15}$ X 8 = 160
Passengers travelled to Ooty using Go Air
= 480 – (160 + 180) = 140
Passengers travelling to Goa using Air India = 220 – 160 = 60
Passengers travelling to Goa using Go Air = 220 – 140 = 80

Flight Operator	Total Passengers	Passengers to Ooty	Passengers to Goa
Air India	220	160	60
Indigo	360	180	180
Go Air	220	140	80
Total Passengers	800	480	320

46. (a); Unoccupied capacity of Air India
= 180 + 180 – 160 – 60 = 140
Total passengers to Ooty = 480
Required percentage = $\frac{140}{480}$ X 100 = $29\frac{1}{6}\%$

47. (c); Required average = $\frac{160+180}{2}$ = 170

48. (d); Unoccupied seats
Air India = 180 + 180 – 160 – 60 = 140
Indigo = 180 + 180 – 180 – 180 = 0
Go Air = 180 + 180 – 140 – 80 = 140

49. (b); Required ratio = $\frac{160+140}{180+80}$ = $\frac{300}{260}$ = 15 : 13

50. (e); required % = $\frac{180-140}{140}$ X 100 = 28.57
= 29% (approx.)

51. (b); Let total labor working in 2013 = 100x
Total child labor working in 2013 = 28x
ATQ –
$28x \times \left(\frac{4}{7}-\frac{3}{7}\right) = 48 \Rightarrow 4x = 48 \Rightarrow x = 12$
Required difference = $1200 \times \left(\frac{40}{100}-\frac{32}{100}\right) = 96$

52. (e); Let total labors working in 2011 = 500y
So, total labors working in 2015 = 600y
Total female labor working in 2015
= $600y \times \frac{24}{100} = 144y$
Total child labors working in 2011
= $500y \times \frac{20}{100} = 100y$
Required percentage = $\frac{144y-100y}{100y} \times 100 = 44\%$

53. (c); Let total labors working in 2011 = x
And, total labors working in 2012 = y
Total male labors working in 2011 = 0.5x
And, total male labors working in 2012 = 0.48y
ATQ -
$\frac{0.5x}{0.48y} = \frac{5}{4} \Rightarrow$ x : y = 6 : 5
So, y = $\frac{5x}{6}$
ATQ -
$x + \frac{5x}{6} = 2200 \Rightarrow x = 1200$
y = 1000
Total child labors working in 2011 & 2012 together = $1200 \times \frac{20}{100} + 1000 \times \frac{20}{100} = 440$

54. (c); Total child labor working in 2014 = $\frac{2000}{25} = 80$
Total male labors working in 2014 = $80 \times \frac{60}{10}$
= 480
Total child labor working in 2015 = 80 + 220
= 300
Total male labors working in 2015 = $300 \times \frac{56}{20}$
= 840
Required ratio = $\frac{480}{840} = 4:7$

55. (e); Let total labors working in 2011, 2012 and 2013 be 80a, 100a & 50a respectively
Total female labors working in 2011
= $80a \times \frac{30}{100} = 24a$
Total female labors working in 2012
= $100a \times \frac{32}{100} = 32a$
Total female labors working in 2013
= $50a \times \frac{32}{100} = 16a$
ATQ –
24a + 32a + 16a = 720
72a = 720 ⇒ a = 10
Total number of child labors working in 2011, 2012 and 2013
= $800 \times \frac{20}{100} + 1000 \times \frac{20}{100} + 500 \times \frac{28}{100}$
= 160 + 200 + 140 = 500

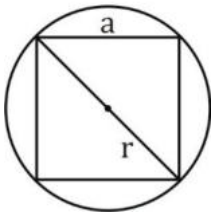
56. (d); Let present age of Chintu be 5x years
Then present age of Binny=8x years
And present age of Amit=6x years
ATQ
$8x - 5x - (8x - 6x) = 6$
$x = 6$
Required average=40 years

57. (a); Let the speed of boat in downstream be 8x km/hr
Then speed of boat in still water=5x km/hr
Speed of boat in upstream = 5x – (8x-5x)
= 2x km/hr
ATQ
$\frac{30}{5} = 2x \Rightarrow x = 3$
Required time=$\frac{84}{24} = 3.5\ hrs.$

58. (e); Let the numerator and denominator of a fraction be x and y respectively
ATQ
$x + 4 = 1.5y$ ..... (i)
And $\frac{x+5}{2y} = \frac{x}{y} \Rightarrow x = 5$
and y = 6
Original fraction=$\frac{5}{6}$
Required fraction=$\frac{5}{6} \times 2 = \frac{5}{3}$

59. (d); Let the efficiency of B be 5x units/day
Then efficiency of A=7x units/day
efficiency of C is =$\frac{6}{7} \times 7x = 6x$ units/day
$\therefore A : B : C = 7 : 5 : 6$
ATQ,
Total work = (A + C) × 18 = (7 + 6) × 18
= 234 units
Required days = $\frac{234 \times 2}{(7+5+6)} = 26$ days.

60. (b); Let side of square be a cm and radius of circle be r cm.



Area of the square field=220.5 m^2
Diagonal of the square field=21 m
Radius of the circular field
= $\frac{\text{Diagonal of the square field}}{2} = 10.5$ m
Area of the circular field=346.5 m^2
Area of the remaining circular field= 126 m^2

61. (a); Fruits consumed on Monday and Tuesday together = $\left(\left(20{,}000 \times \frac{40}{100}\right) - \left(15{,}000 \times \frac{42}{100}\right)\right) + \left(\left(20{,}000 \times \frac{8}{100}\right) - \left(15{,}000 \times \frac{6}{100}\right)\right)$
= (8,000 – 6,300) + (1,600 – 900) = 2,400
Vegetables consumed on Wednesday and Thursday together = $15{,}000 \times \frac{10+10}{100} = 3{,}000$
Required % = $\frac{3{,}000-2{,}400}{3{,}000} \times 100 = 20\%$

62. (d); Fruits consumed on Saturday
= $\frac{150}{100} \times \left(\left(20{,}000 \times \frac{30}{100}\right) - \left(15{,}000 \times \frac{32}{100}\right)\right)$
= 1800
Vegetables consumed on Saturday = $1800 \times \frac{3}{2}$
= 2700
Total fruits and vegetables consumed on Saturday = 1800 + 2700 = 4500

63. (b); Fruits consumed on Wednesday and Thursday together = $\left(\left(20{,}000 \times \frac{10}{100}\right) - \left(15{,}000 \times \frac{10}{100}\right)\right) + \left(\left(20{,}000 \times \frac{12}{100}\right) - \left(15{,}000 \times \frac{10}{100}\right)\right)$
= (2000 − 1500) + (2400 − 1500) = 1400
Total fruits and vegetables consumed on Wednesday and Thursday together
= $20{,}000 \times \frac{10+12}{100} = 4400$
Required % = $\frac{1400}{4400} \times 100 = 31\frac{9}{11}\%$

64. (e); Average of fruits consumed on Tuesday, Wednesday and Thursday = $\frac{1}{3} \times \left(\left(20{,}000 \times \frac{8+10+12}{100}\right) - \left(15{,}000 \times \frac{6+10+10}{100}\right)\right) = 700$
Average of vegetables consumed on Monday and Friday = $\frac{1}{2} \times \left(15{,}000 \times \frac{42+32}{100}\right) = 5550$
Required difference = 5550 − 700 = 4850

65. (c); Required difference = $15{,}000 \times \frac{(32+6)-(10+10)}{100}$
= 2700

Solutions (66-70):
Let total crop production in 2012 & 2013 be 13x tonnes and 20x tonnes respectively.
Now, total crop production in 2014 = $\frac{160}{100} \times 20x = 32x$
Now, total crop production in 2015 = $\frac{13x+32x}{2} = 22.5x$
And, total crop production in 2016 = $22.5x \times \frac{100}{90} = 25x$
ATQ,
$\frac{13x + 20x + 32x + 22.5x + 25x}{5} = 4500 \Rightarrow x = 200$

Year	Total crop production (in tonnes)
2012	2600
2013	4000
2014	6400
2015	4500
2016	5000

66. (b); Total crop production in 2015 & 2016 together = 4500 + 5000 = 9500 tonnes

67. (e); Required difference = $\frac{36-17}{36+27+17} \times 4000$
= 950 tonnes

68. (d); Required revenue
$= \left(2600 \times \frac{8}{8+5} \times 625\right) + \left(2600 \times \frac{5}{8+5} \times 500\right)$
= 10,00,000 + 5,00,000 = Rs.15,00,000

69. (b); Let production of wheat and rice in the village in 2017 be 4x tonnes and 3x tonnes respectively.
ATQ,
$4x - \left(5000 \times \frac{16}{16+9}\right) = 400 \Rightarrow x = 900$
Hence, required percentage = $\frac{3\times900}{5000\times\frac{9}{25}} \times 100$
= 150%

70. (a); Required ratio = $\frac{4000}{6400}$ = 5 : 8

71. (d); **Quantity I**:
length of train = $\frac{24\times75}{18} \times 5 = 500$ meter.
Quantity II:
Let speed of train be 'V km/hr' and length of train be 'x meter'.
ATQ,
$\frac{x}{12} = V$ ...(i)
Now,
$\frac{x+1800}{55.2} = V$ ...(ii)
On solving (i) & (ii), we get:
$x = 500\ meter$
So, Quantity II = quantity I

72. (b); **Quantity I:** Let C. P = Rs. 100 x
Then M. P= $100\ x \times \frac{150}{100}$ = Rs. 150x
S.P = $100x \times \frac{120}{100}$ = Rs. 120x
ATQ,
120 x = Rs. 1020
x = Rs. 8.5
So, 150x = Rs. 1275
Quantity II:
Perimeter of field = 37.5 ×4 =150 meter
=15000 cm.
Total cost of fencing = 15000×0.17 = Rs. 2550
So, Quantity I < Quantity II.

73. (e); **Quantity I:**
$(x+3)^2 = (x-3)^2+x^2$
$x^2+9+6x=x^2+9-6x+x^2$
$x^2-12x=0$
$x(x-12)=0$
x=0,12
Quantity II:
$y^2-29y+204=0$
$y^2-12y-17y+204=0$
$y(y-12)-17(y-12)=0$
$(y-12)(y-17)=0$
y=12, 17
So, Quantity II ≥ Quantity I

74. (a); **Quantity I:**
Amount = $2450 + 2450 \times \frac{1}{7} \times 2$
$= 2450 + 700$ = Rs. 3150
Quantity II:
Amount = $2450\left(1+\frac{1}{8}\right)^2$
$= 2450 \times \frac{81}{64}$ =Rs 3100.78.
So, Quantity I > Quantity II

75. (d); **Quantity I:**
Let total M. R. P of 5 article = Rs. 100x
1 article is free, then S. P for 5 articles
= 100x – 20x = Rs. 80x
Again, he gives 20% discount, S.P become of each article = $80x \times \frac{80}{100} \times \frac{1}{5}$ = Rs. $12.8x$
Actual Discount percentage=$\frac{20x-12.8x}{20x} \times 100$
$= \frac{7.2}{20} \times 100 = 36\%$
Quantity II:
Let C.P = Rs. x
Let Initial S.P= Rs. 7y
Final S.P = Rs. 8y
ATQ
$\frac{36}{19}\left(\frac{7y-x}{x}\right) \times 100 = \frac{8y-x}{x} \times 100$
252y – 36x = 152y – 19x
$\frac{x}{y} = \frac{100}{17}$
Let C.P= Rs. 100a
Final S.P= Rs. 136a
Final profit % = $\frac{136a-100a}{100a} \times 100 = 36\%$
So, Quantity I = Quantity II

76. (b); Let the cost price and selling price of B be Rs x and Rs y respectively
CP of A = (x + 600)
And SP of A = (y + 1200)
Difference of their profits
$= (y + 1200 - x - 600) - (y - x) = 600$
ATQ
$(x + 600) \times \frac{40}{300} = 600 \Rightarrow x = 3900$
Profit earned of B = $4500 \times \frac{1}{3} - 600 = Rs\ 900$

77. (b); Let quantity of milk and water be x lit and y lit respectively.
Then
$x + y = 100$ ..... (i)
And
$x - y = 68$ ..... (ii)
From (i) and (ii)
x= 84 & y=16
ATQ
$\frac{84-a}{16+a+15} = \frac{3}{2}$
$\Rightarrow 5a = 75 \Rightarrow a = 15$ lit

78. (a); Let initial investment of Maanik be Rs x.
Investment of Sumit= Rs 1.25x
Sumit Maanik Ravi
$(1.25x\times 8 + 1.25x \times 1.2 \times 4) : (x\times 8+1.25x\times 4) : 8000\times 12$
16x : 13x : 96000
Let profit share of Sumit, Maanik and Ravi be Rs 16xy, 13xy and 96000y respectively
ATQ
$16xy = 96000y \Rightarrow x = 6000$
Required profit share%=$\frac{78000}{270000} \times 100 = 28\frac{8}{9}\%$

79. (e); Let length of the rectangle be 4x cm
Then breadth of that rectangle= 3x cm
ATQ
$4x \times 3x = 432 \Rightarrow x = 6$
Length=24 cm and breadth= 18 cm
Diagonal=$\sqrt{(576 + 324)} = 30$ cm
Required ratio=$\frac{120}{900} = 2:15$

80. (a); Let speed of train A be 5x km/hr
Then speed of train B=6x km/hr
ATQ—
$(6x + 5x) \times \frac{5}{18} = \frac{120+180}{\frac{60}{11}} \Rightarrow$
x = 18
Required time== $\frac{120+180}{(108-90)\times\frac{5}{18}}$ = 60 sec

ENGLISH LANGUAGE

81. (e); All the sentences are correct. Government in the budget this year has announced the additional funding to Mudra, add-on of a 180-day window of forbearance for payment dues from small borrowers and abolition of loan limits in the MSME. Hence option (e) is the correct choice.

82. (d); As mentioned in second paragraph of the passage that finance minister highlighted the responsibilities of regulators of PSU banks i.e. RBI. Here unfortunately determines the negative point that politicians are made responsible for frauds and scams in banks rather than regulators.
Hence option (d) is the correct choice.

83. (d); Refer the third paragraph of the passage.

84. (c); Refer the first few lines of second paragraph "Training was initiated for senior officers of the major
banks." "the supervisory system overhauled on to a new risk-based supervision (RBS) platform.".

85. (d); The author has given deep analysis of decision of RBI governor Urjit Patel regarding monetary policy,
with a neutral outlook. Hence **'critical'** is the correct tone of the author.

86. (e); All of the sentences are correct. Refer to fourth and fifth paragraphs of the passage.

87. (b); **Perpetually** means never ending or changing, having same meaning as **constantly.**
Abate means becoming less intense.
Dissent means disagreement.
Stride means a decisive step, advance, proceed.

88. (e); **Forbearance** means patient self-control; restraint and tolerance, having same meaning as **tolerance. Recuperate** means recover or regain.
Usurp means take illegally or by force.

89. (d); **Overhaul** means take apart (a piece of machinery or equipment) in order to examine it and repair it if necessary. Hence it has the opposite meaning to **ruin.**
Ensue means happen or occur afterwards or as a result.
Acquiesce means accept something reluctantly but without protest.
Hapless means unfortunate.

90. (e); **Supersede** means take the place of (a person or thing previously in authority or use); supplant. Hence it has the opposite meaning to retain.
Relinquish means voluntarily cease to keep or claim; give up. Concede means admit or agree that something is true after first denying or resisting it.
Herald means a person or thing viewed as a sign that something is about to happen.
Confide means tell someone about a secret or private matter while trusting them not to repeat it to others.

91. (a); Option (a) is incorrect as apprised should be used here.
Appraise means to ascertain the value of and does not mean to apprise or to inform. Correct: "I appraised the jewels." / "I apprised him of the situation."

92. (c); Option (c) is incorrect as credible should be used in place of credulous.
Credible means believable and does not mean credulous or gullible. Correct: "His sales pitch was not credible." / "The con man took advantage of credulous people."

93. (b); In option (b) the use of flaunt is incorrect and must be replaced with flout.
Flaunt means to show off and does not mean to flout. Correct: "She flaunted her abs." / "She flouted the rules."

94. (b); In option (b) the use of unbearable is incorrect and untenable should be used instead.
Untenable means indefensible or unsustainable and does not mean painful or unbearable. Correct: "Now that all the facts have been revealed, that theory is untenable." / "Her death brought him unbearable sadness."

95. (d); Option (d) is incorrect as luxuriant should be replaced with luxurious.
Luxuriant means abundant or florid and does not mean luxurious. Correct: "The poet has a luxuriant imagination." / "The car's fine leather seats were luxurious."

96. (e); All the given sentences are grammatically correct.

97. (e); In this sentence, use of 'He' is superfluous as the subject of 'Being' is 'Gopal'. It is to be noted that whenever a sentence containing Participle is used with only one Subject which does dual work, then a Subject is not required before Participle.
e.g. Being tired, he sat down. [= As he was tired, he sat down.]

98. (b); Replace "Knowledge of regional language" by "The knowledge of a regional language" as generally "The + Noun + of + Noun" is used. Also, 'regional language' is a Singular Countable Noun. So 'a' will be used before 'regional language'. Hence the correct form of the sentence should be - The knowledge of a regional language.

99. (a); Use 'with' in place of 'on' as "angry with somebody" and "angry at something" are the correct usage.
e.g. He is angry with you.
He is angry at your behavior.

100. (c); Replace 'with' by 'an' as "blind in the right eye/the left eye" is used while "blind with both the eyes" is the correct usage.

101. (c); Use 'to' in place of 'rather than' as when two nouns or gerunds are compared using the word 'prefer', the preposition 'to' is used. e.g. She preferred playing to gossiping.
However when 'prefer' is used to compare two infinitives, 'rather than' is used instead of 'to'. e.g. We preferred to read rather than write.

102. (e); All the given sentences are grammatically correct.

103. (c); The correct arranged form of the given paragraph is EADCB. Hence (B) must be the last sentence of the paragraph. This is because it concludes the paragraph which talks about GSLV Mk III that is it talks about its applications and uses among which one is catering to the needs of the people in J&K and the Northeast by the help of communication.

104. (b); Option (b) is the appropriate choice as the answer. (A) is the second statement of the paragraph when it will be arranged in a coherent way. The sentence starts with 'It' which means something has to be mentioned beforehand about which we are talking so it will be second sentence that is ISRO which plans to use this for the Chandrayaan-II moon mission in the early months of 2019.

105. (e); Option (e) is the correct choice as the answer. (C) will be the fourth sentence when the paragraph is arranged in a coherent way. The sentence that precedes sentence (C) is sentence (D) which mentions about satellite GSLV where the satellite's closest approach to earth would be 190 km and the farthest 35,975 km. So after (D) it must be (C), as statement (C) refers the details about GSLV.

106. (a); Option (a) is the most correct choice as the answer. The correct sequence of arrangement of paragraph is EADCB.

107. (d); Option (d) is the most suitable choice as the answer of the option. The first sentence is the opening line of the sentence which gives introduction to the paragraph which is that The Indian Space Research Organization (ISRO) has marked a big milestone by successfully testing its heavy-lift launcher while launching an advanced communication satellite.

108. (a); The highlighted word in the first part is incorrectly spelled as "Monetry". However, the precise spelling of the word in "Monetary" and it means relating to money or currency. All the other words have been spelt correctly and are in appropriate grammatical syntax. Hence, option (a) is the most suitable answer choice.

109. (d); The highlighted word in the fourth part is incorrectly spelled as "behviour". However, the precise spelling of the word in "behaviour" or "behavior" and it means the way in which one acts or conducts oneself, especially towards others. All the other words have been spelt correctly and are in appropriate grammatical syntax. Hence, option (d) is the most suitable answer choice.

110. (b); The highlighted word in the first part is incorrectly spelled as "faling". However, the precise spelling of the word in "falling" and it means move from a higher to a lower level, typically rapidly and without control. All the other words have been spelt correctly and are in appropriate grammatical syntax. Hence, option (b) is the most suitable answer choice.

111. (a); **"impose"** is the most appropriate word in the context of its meaning to the sentence. It is to be noted that the sentence is talking about the authoritarian governments, so the word "impose" makes the sentence more meaningful. Hence option (a) is the correct choice.
Impose means force (an unwelcome decision or ruling) on someone.
Urge means try earnestly or persistently to persuade (someone) to do something.

112. (c); **"merit"** is the most appropriate word that fits into the provided space adding meaning to the sentence.
Other words do not give a contextual essence to the sentence. Hence option (c) is the correct choice.
Merit means the quality of being particularly good or worthy, especially so as to deserve praise or reward.

113. (e); **"stymied"** is the most appropriate word that fits perfectly into the provided space. The word **"stymied"** means **prevented or hindered the progress of.** Other words are contextually incorrect. Hence option (e) is the correct choice.
Clasp means hold (someone) tightly.
Abet means encourage or assist (someone) to do something wrong, in particular to commit a crime.

114. (b); **"engrained"** is the most appropriate word that fits perfectly into the provided space. The word **"engrained"** means **firmly fixed or established (a habit, belief, or attitude) in a person.** Other words are contextually incorrect. Hence option (b) is the correct choice.
Chisel means cut or shape (something) with a chisel.
Erode means gradually destroy or be gradually destroyed.

115. (a); **"autocracy"** is the most appropriate word that fits perfectly into the provided space. The word **"autocracy"** means **a system of government by one person with absolute power.** The word **"autocrat"** in the latter part of the sentence suggests that **"autocracy"** would give the most logical meaning to the sentence. Hence option (a) is the correct choice.

116. (b); **"remarkably"** is the most appropriate word that fits into the provided space adding meaning to the sentence. Other words do not give a contextual essence to the sentence. Hence option (b) is the correct choice.
Remarkably means in a way that is worthy of attention.

117. (c); **"insisted"** is the most appropriate word that fits into the provided space adding meaning to the sentence. Other words do not give a contextual essence to the sentence. Hence option (c) is the correct choice.
Insist means demand something forcefully, not accepting refusal.
Endure means remain in existence; last.
Acquire means buy or obtain (an asset or object) for oneself.
Pretend means behave so as to make it appear that something is the case when in fact it is not.

118. (d); **"trained"** is the most appropriate word that fits into the provided space adding meaning to the sentence. It is to be noted that the expression **"highly trained economists and other professionals"** makes the sentence logically meaningful. Hence option (d) is the correct choice.
Amateurish means done in an unskillful or inept way.

119. (e); **"dominated"** is the most appropriate word that fits into the provided space adding meaning to the
Sentence. Other words do not give a contextual essence to the sentence. Hence option (e) is the correct choice.
Oppress means cause distress or anxiety to.
Dominate means have power and influence over.

120. (c); **"status"** is the most appropriate word that fits into the provided space adding meaning to the sentence. Other words do not give a contextual essence to the sentence. Hence option (c) is the correct choice.
Status means relative social or professional position; standing. **Phase** means a distinct period or stage in a process of change or forming part of something's development.

REASONING ABILITY

Directions (1-5): Read the following information carefully and answer the questions given below.

Eight persons i.e. C, D, E, J, K, P, R and Q sitting in a two-parallel row such that person sitting in row 2 faces north and the person sitting in row 1 faces south. They all are of different age. The one who faces K sits third to the right of J. One of the immediate neighbour of K is 9 years old and faces E. D sits second to the right of R. Q faces south direction. D does not sit in the same row with E. One of the immediate neighbour of E faces the one who is 14 years old. One of the immediate neighbour of R faces C, who is 7 years old. C does not face the immediate neighbour of D. P is 18 years of Age. The one who is 10 years of age sits second to the right of the one who is 23 years of age. K is 1 year older than D, whose age is an even number. The immediate neighbour of P faces the one who is 12 years of age and faces south direction.

1. Who among the following is 23 years of Age?
(a) D (b) R (c) C
(d) J (e) None of these

2. Who among the following is the immediate neighbour of C?
(a) E (b) J (c) P
(d) R (e) None of these

3. What is the age of D (in years)?
(a) 9 years (b) 23 years (c) 12 years
(d) 10 years (e) None of these

4. Four of the following five belongs to a group find the one that does not belong to that group?
(a) K (b) J (c) D
(d) C (e) Q

5. Who among the following pairs are the immediate neighbour of Q?
(a) C and J (b) D and R (c) P and R
(d) K and P (e) None of these

Directions (6-10): Study the following information carefully and answer the questions given below:

Six persons A, B, C, D, E and F sit around a circular table equidistant to each other facing center. Each of them is from different city viz. Delhi, Mumbai, Kolkata, Hyderabad, Chennai and Pune but not necessarily in the same order.
Only one person sits between A and the one who is from Pune. The one who is from Mumbai sits second to the right of one who is from Pune. F sits opposite to the one who is from Mumbai. F sits second to the left of C. Only one person sits between the one who is from Chennai and C. E sits immediate left of the one who is from Chennai. F is not from Chennai and D is not from Pune. The one who is from Delhi sits second to the left of the one who is from Kolkata.

6. Who among the following belongs to Kolkata?
(a) A (b) B (c) C
(d) D (e) E

7. The one who sits opposite to C belongs to which city?
(a) Kolkata (b) Hyderabad (c) Pune
(d) Delhi (e) Mumbai

8. E belongs to which city?
(a) Mumbai (b) Kolkata (c) Pune
(d) Chennai (e) Delhi

9. How many persons sit between A and D counting from right of A?
(a) one (b) two (c) three
(d) four (e) None

10. Who belongs to Chennai?
(a) B (b) C (c) D
(d) E (e) F

Directions (11-15): Read the following information carefully and answer the questions given below.
Six employees J, K, L, M, N and P work in a company at different post viz. clerk, PO, AM, MG, DGM and GM. All the designations given are to be considered in a given order (as GM is considered as Senior-most and Clerk is considered as the Junior-most). Each of them belongs to six different cities viz. Gwalior, Mangalore, Cuttack, Kochi, Shimla and Thrissur.

Only two persons are junior to M, who belongs to Kochi. N is senior to M but junior to the one who belongs to Cuttack. J is immediate senior to the one who belongs to Thrissur. The one who is from Gwalior is immediate junior to L. J is not from Cuttack. The one who is junior most belongs to Shimla. K does not belong to Mangalore.

11. Who among the following is DGM?
(a) J (b) K (c) L
(d) M (e) N

12. GM of the company belongs to which city?
(a) Mangalore (b) Gwalior (c) Thrissur
(d) Cuttack (e) Cannot be determined

13. How many persons are senior to the one who belongs to Mangalore?
(a) one (b) two (c) three
(d) four (e) five

14. P belongs to which city?
(a) Mangalore (b) Gwalior (c) Thrissur
(d) Cuttack (e) Cannot be determined

15. Who is immediate junior to J and he belongs to which city?
(a) N, Kochi (b) P, Mangalore (c) L, Shimla
(d) K, Cuttack (e) N, Thrissur

Directions (16-18): Read the following information carefully and answer the questions given below.
Six jars namely C, D, E, F, G and H contains different amount of mixtures. Jar E has more than 10 litre mixture. Jar C is lighter than only two jars. E is heavier than D but lighter than F. Jar G is heavier than H. F is not heaviest. Jar H is heavier than D and has 9 litre mixture.

16. Which among the following jar is second lightest?
(a) F (b) C (c) D
(d) H (e) E

17. Which among the following jar is heaviest?
(a) E (b) G (c) F
(d) D (e) H

18. What could be the amount of mixture in jar E if jar C has 16 litre mixture?
(a) 11 litre (b) 8 litre (c) 23 litre
(d) 18 litre (e) 21 litre

Directions (19-20): Study the following information carefully and answer the questions given below:

There are Seven Members A, B, C, D, E, F and L in a family. There are two married couples and only three generations in the family. F is grandmother of B, who is niece of D. F has one son and one daughter. C is brother-in-law of D. L is grandfather of E. B has no siblings.

19. How is F related to mother of B?
(a) sister (b) grandmother (c) daughter
(d) mother (e) wife

20. How is A related to child of D?
(a) Grandfather (b) Aunt (c) Uncle
(d) Brother (e) Cousin

Directions (21-25): Read the following information carefully and answer the questions given below:

Eleven persons i.e. A, B, C, H, L, N, T, G, R, M and Q who all bought laptops on different days one after the other. Three person bought laptop between G and T. Only one person bought laptop between L and T. H bought immediately after T. Four person bought laptop between L and M. Only three persons bought laptop between R and L. More than three persons bought laptop between Q and H. Four persons bought laptop between R and C, who bought laptop after R. Not More than two persons bought laptop after C. More than three person bought laptop between M and B. Q does not bought laptop first or last. A bought laptop before C but after N. M bought after H and B bought after N.

21. Who among the following bought laptop first among all?
(a) N (b) L (c) T
(d) A (e) None of these

22. How many persons bought laptop between N and G?
(a) Two (b) Three (c) One
(d) Four (e) None of these

23. Who among the following bought immediately after A?
(a) Q (b) R (c) B
(d) L (e) None of these

24. Four of the following five pairs belongs to a group find the one that does not belong to that group?
(a) G and C (b) R and T (c) N and H
(d) M and A (e) L and T

25. Which of the following statement is false regarding Q?
(a) Only two persons bought after Q.
(b) More than Three persons bought between Q and T.
(c) Q bought laptop immediately after C
(d) Two persons bought between Q and M.
(e) All are correct

Directions (26-29): Each of the questions below consists of a question and two statements numbered I and II given below it. You have to decide whether the data provided in the statements are sufficient to answer the question.
(a) If statements I alone is sufficient to answer the question, but statement II alone is not sufficient to answer the question.
(b) If statement II alone is sufficient to answer the question, but statement I alone is not sufficient to answer the question.
(c) If statement either I or II is sufficient to answer the question.
(d) If both the statements I and II taken together are not sufficient to answer the questions.
(e) If both the statements I and II taken together are sufficient to answer the questions.

26. Five persons i.e. M, N, O, P and Q who all are of different heights who among the following is the shortest?
I. N is shorter than only one person. O is taller than both P and Q. M is taller than P.
II. Q is taller than only two persons. P is taller than N but shorter than O. N is not the shortest among all.

27. Six persons i.e. A, B, C, D, E and F who sits in a row such that all are facing towards north. Who among the following sits at the right end at the row?
I. A sits second to the right of B. Both A and B does not sit at the end of the row. Only one person sits between E and D.
II. C and F are the immediate neighbour of each other. More than two persons sits between C and A. E is not the immediate neighbour of B.

28. Five persons i.e. U, V, W, X and Y lives in a multi storey building such that ground floor is numbered 1 and above it is number 2 and the top floor is numbered 5. Who among the following lives immediately above V?
I. Only two person lives between V and X. Y does not live above V. Only one person lives between U and Y. X lives below U. V and Y does not lives on adjacent floors of each other.
II. Only one person lives between W and Y. U and V lives on and adjacent floors. One person lives between X and V. Only one person lives between W and U. X lives below V.

29. Six persons i.e. A, B, C, D, E,F sits around a circular table such that facing towards the centre. Who among the following sits second to the left of D?
I. Only one person sits between A and D. Only two persons sits between D and E. Only two persons sits between A and B. B and F are immediate neighbours.
II. Only two person sits between D and A. E sits second to the right of C. Only one person sits between B and F.

Directions (30): Study the following information to answer the given questions:

A word and number arrangement machine when given an input line of words, rearranges them following a particular rule in the given examples. The following is an illustration of input and rearrangement.

Example 1:
Input: ring 14 wise loyal 36 51 down 97.
output: 14 wise 36 ring 51 loyal 97 down.

Example 2:
Input: hello 91 rise given 21 65 blown 40.
output: 21 rise 40 hello 65 given 91 blown.

30. What will be the possible output of the given Input?
Input: Sing 84 pen 25 wrong 39 full 60.
(a) 25 wrong 39 sing 84 pen 60 full.
(b) 39 wrong 25 sing 84 pen 60 full.
(c) 25 wrong 39 sing 60 pen 84 full.
(d) 39 sing 25 wrong 84 pen 60 full.
(e) None of these

Directions (31-34): Study the following information carefully and answer the questions given below:

Arun starts walking in east direction from point A. After walking for 16m he reaches point B. From B he takes right turn and walks for 13m to reach point C. Then he takes left turn and walks 15m to reach point D. Again, he takes left turn and walks for 20m to reach point E and stop.

Arun's friend Luv starts from P and walks for 16m in west direction to reach point Q.
(Note: Point P is North of Point B and also West of Point E.)

31. What is the shortest distance between Q and A?
(a) 13m (b) 18m (c) 9m
(d) 10m (e) 7m

32. Point Q is in which direction with respect to point C ?
(a) North (b) South (c) Northwest
(d) Northeast (e) Southwest

33. If F is the mid-point of line ED the F is in which direction with respect to point B?
(a) East (b) Southeast (c) Southwest
(d) Northeast (e) West

34. Find the odd one out among the following?
(a) BQ (b) CA (c) DP
(d) CQ (e) EB

35. If in a certain code (10, 23, 52) is written as (5, 11, 26) and (61, 18, 47) is written as (30, 9, 23) then how (3616, 25, 11) can be coded?
(a) 187, 12, 5 (b) 188, 13, 5 (c) 1808, 13, 6
(d) 3616, 12, 5 (e) 1808, 12, 5

Directions (36-39): Read the following information carefully and answer the questions given below:

Nine persons i.e. P, Q, R, S, T, X, W, U and V who all born on different dates in three different months i.e. January, June and December but not necessarily in the same order. Only three persons born in any of the month. One person born between X and R. Both X and R does not born in the month having 30 days. Five persons born between P and R. P born on the 30th of the month. X born before R. The one who born immediately before R was born on 18th. T born on 24th but not in the month X and P born. V born on 25th and immediately after T. Only one person born between W and U. The number of persons born between S and V is same as the number of persons sits between V and W. R born on the last day of the month. S born on 27th but not in the month in which T born. The one who born before W born on 16th. One of the persons born on 29th in the month of June. There is a difference of 8 days between the birthdate of Q and S.

36. How many persons born after R?
(a) Two (b) Three (c) Four
(d) One (e) No One

37. Who among the following pair of persons born in the same month?
(a) W and V (b) V and P (c) Q and U
(d) W and R (e) None of these

38. Who among the following born immediately after X?
(a) U (b) W (c) S
(d) Q (e) None of these

39. X born on which of the following day?
(a) 16th (b) 29th (c) 20th
(d) 26th (e) None of these

Directions (40): In each question below are given some statements followed by two conclusions numbered I and II. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements, disregarding commonly known facts. Give answer
(a) If only conclusion I follows.
(b) If only conclusion II follows.
(c) If either conclusion I or II follows.
(d) If neither conclusion I nor II follows.
(e) If both conclusions I and II follow.

40. **Statement:** Some Doctor are Student.
All Professor are Doctor.
Some teacher are Scholar.
No Student are Scholar.

Conclusion:
I. Some Teacher are not student.
II. All Doctor never be Scholar.

QUANTITATIVE APTITUDE

Direction(41-45): The table shows the total no. of mails received in inbox by different users & the percentage of mails read by the users & the total no. of spam mails received in a month.

Users	Total no. of mails received in inbox	% of inbox mails read by user	Total no. of spam mails received
X	725	68%	88
Y	840	65%	82
Z	800	–	152
K	–	45%	92
L	580	–	76

Note:
1. Total no. of mails received = Total mails received in inbox + total no. of spam mail received
2. Spam mails are not read by user.
3. Some data are missing, calculate if necessary.

41. Average no. of mails received in inbox by user X, Y & K is 750% of average no. of spam mail received by user X, Y and K. Then find the total no. of mails received by user K?
(a) 492 (b) 528 (c) 426
(d) 482 (e) None of these

42. Inbox mails read by user Z is what percentage of total mails received in inbox of Z given that inbox mails read by user Z is 125% of total spam mails received by user K?
(a) 14.375% (b) 19.25% (c) 24.125%
(d) None of these (e) 11.215%

43. Inbox mails read by user X & Y together is how much more/less than spam mails received by the same user together?
(a) None of these (b) 939 more (c) 728 less
(d) 869 more (e) 829 more

44. Total no. of mails received by K is approximately what percent of inbox mails read by user X given that mails received in inbox by K is thrice of mails received in spam by X?
(a) 54% (b) 62% (c) 78%
(d) 68% (e) 72%

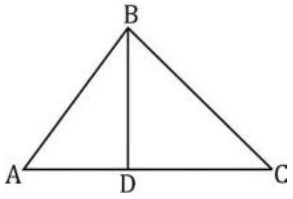
45. Number of inbox mails which are not read by user Z is 150% more than mails received in spam by user X. Then find average of inbox mails read by user Z & Y?
(a) None of these (b) 618 (c) 425
(d) 563 (e) 589

Directions (46-50): The following questions are accompanied by two statements (I) and (II). You have to determine which statements(s) is / are sufficient / necessary to answer the questions.

46. Find the value of $9^{\frac{1}{x}} + 9^{\frac{1}{y}}$?
I. The difference of inverse of x & y is 8/3.
II. the multiplication of x & y is 3.
(a) Only I (b) Only II (c) Either I or II
(d) Only I and II (e) None of the above

47. How many women are required to complete the work in 12 days.
I. Efficiency of men are ⅔ rd of efficiency of women.
II. 16 men can complete the same work in 10 days.
(a) Only I (b) Only II (c) Either I or II
(d) Only I and II (e) None of the above

48. In the triangle ABC. Find ∠ABD ?

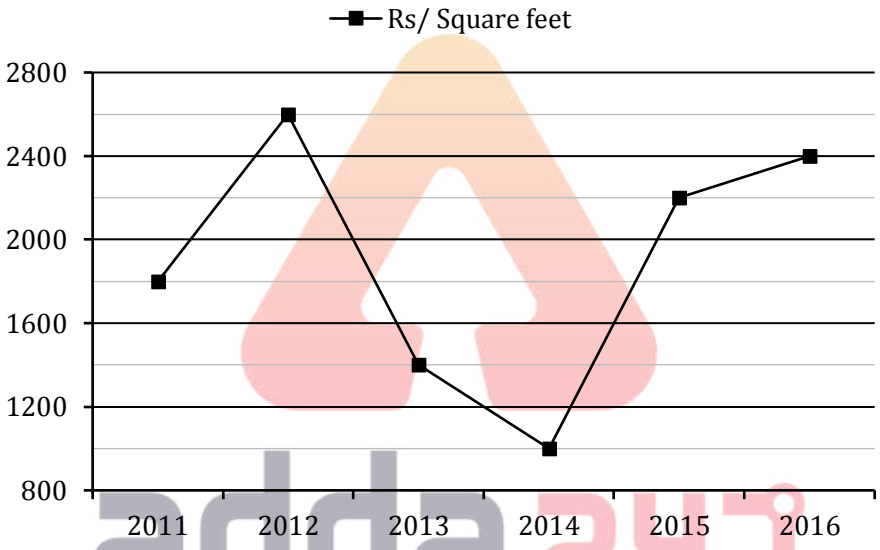


I. Given that BC = CD.
II. ∠ABC – ∠BAC = 30°
(a) Only I (b) Only II (c) Either I or II
(d) Only I and II (e) None of the above

49. What is the C.I. on a sum at the end of 3 years ?
I. C.I. at the end of two years is Rs. 110.
II. Difference between CI and SI at the end of two year is Rs. 100 and rate percent is 10%.
(a) Only I (b) Only II (c) Either I or II
(d) Only I and II (e) None of the above

50. Two trains X and Y starts from point A and B respectively towards each other. What is the distance between them when they start ?
I. When both trains cross each other, time taken by train X to reach B is twice the time taken by train Y to reach A.
II. Distance between them after 60 min. is 800 km.
(a) Only I (b) Only II (c) Either I or II
(d) Only I and II (e) None of the above

Direction (51-55): Study the given line graph carefully & answer the questions.
Line-graph given below shows the price per square feet of land in different years.



51. In 2015, if Rahul bought a plot of 1800 sq. feet. Then how much plot he has bought with the same amount in 2016?
(a) 1650 sq. feet (b) 1720 sq. feet (c) 1825 sq. feet
(d) None of these (e) 1850 sq. feet

52. In 2016 if veer bought a plot 800 sq. feet & want to sell it in 2017 to earn profit of 20%. Then find the price per sq. feet in 2017 for same plot?
(a) Rs. 2250
(b) None of these
(c) Rs. 2730
(d) Rs. 2880
(e) Rs. 2460

53. If Satish bought 1840 sq. feet land in 2012 and Sandy bought 1640 sq. feet land in 2014. Then find ratio of amount spent by Satish in 2012 to amount spent by sandy in 2014?
(a) 3 : 5 (b) 205 : 598 (c) 598 : 205
(d) 538 : 207 (e) 598 : 305

54. If Ayush bought a plot in 2010 at a price $\frac{3}{4}$ th of the price in 2013. Then, find difference of amount paid by Ayush to buy plot of 2240 sq. feet in 2010 and 2013.
(a) Rs. 8.28 lakh (b) Rs. 4.84 lakh (c) Rs. 5.64 lakh
(d) Rs. 6.28 lakh (e) Rs. 7.84 lakh

55. If plot bought by Abhi in 2016 is 2420 sq. feet and plot bought by Roly in 2011 is 1640 sq. feet. Then find average of money spent by Abhi and Roly?
(a) Rs. 58.6 lakh (b) Rs. 53.4 lakh (c) None of these
(d) Rs. 43.8 lakh (e) Rs. 48.2 lakh

56. When digits of a first two digit number are reversed, then the resulting number will become 75% of second two digit number. The difference of squares of tens digit and units digit of the second number is 20. Find the first number.
(a) 77 (b) 89 (c) 111
(d) 84 (e) 95

57. A vessel contains 25 liters petrol. 20% of the petrol is replaced by kerosene oil, after that 30% of the mixture is replaced by kerosene oil. Now, find the quantity of petrol in the final mixture is what percent of the quantity of petrol in the vessel initially.
(a) 63% (b) 47% (c) 51%
(d) 56% (e) 67%

58. Aman can complete a piece of work in 36 days. Aman and Bhanu together can complete the same work in 20 days. If Chaman is working at 60% of Aman's efficiency, then find in how many days Aman, Bhanu and Chaman can complete the same work together.
(a) 15 days (b) 19 days (c) 9 days
(d) 26 days (e) None of the above.

59. A lighthouse is situated 30 km away from the shore. If ratio of time taken by boat to reach lighthouse during upstream and during downstream is 2 : 1, then find the ratio of speed of the boat to the speed of the stream.
(a) 1 : 3 (b) 3 : 1 (c) 5 : 3
(d) 3 : 5 (e) 4 : 7

60. Ratio of curved surface area of hemispherical bowl to curved surface area of conical tent is 6 : 5 and radius of bowl and tent is equal. Then, find the ratio volume of conical tent to the volume of hemispherical bowl.
(a) 3 : 2 (b) 2 : 3 (c) 6 : 7
(d) 7 : 6 (e) 3 : 4

61. Average weight of 100 employees of a company is 60 kg. Average weight of male employees and female employees is 70kg and 45kg respectively. Then, find the ratio male employees to female employees in the company.
(a) 1 : 4 (b) 4 : 1 (c) 7 : 6
(d) 6 : 7 (e) 3 : 2

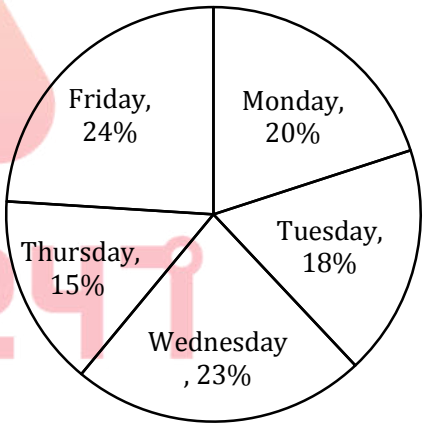
62. A shopkeeper who sells same marked price shirts, announced an offer – if one buys two shirts then the buyer can buy the third shirt at the discounted price of Rs. 150. Ram took the offer and bought 12 shirts by paying Rs. 5,000 only. Find the overall discount percentage allowed by the shopkeeper.
(a) $17\frac{16}{33}\%$ (b) $29\frac{10}{33}\%$ (c) $24\frac{8}{33}\%$
(d) $36\frac{10}{33}\%$ (e) $28\frac{8}{33}\%$

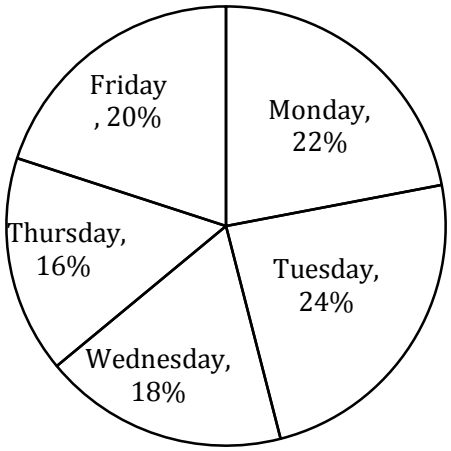
63. Five two – way pipes A, B, C, D & E can either fill the empty tank or can empty the full tank in 15 minutes, 18 minutes, 6 minutes, 16 minutes and 24 minutes respectively. All five pipes were opened simultaneously when the tank is empty. Then, find which combination of tank can exactly fill 50% of the tank.
(a) A, B and D are filling pipes and C is emptying pipe.
(b) A and B are filling pipes and C and D are emptying pipes.
(c) E is filling pipe and B and C are emptying pipes.
(d) C and E are filling pipes and A is emptying pipe.
(e) None of the above.

64. Two dices are rolled twice. Then, find the probability that the sum of the numbers on each dice is divisible by 4.
(a) $\frac{1}{4}$ (b) $\frac{7}{36}$ (c) $\frac{1}{6}$
(d) $\frac{1}{3}$ (e) $\frac{11}{36}$

65. Aman & Bhanu invested Rs. 8,000 and Rs. 12,000 in a partnership firm. After 6 months, Aman further invested Rs. 12,000. Aman is entited to 10% commission on profit before deducting tax and the remaining profit is shared between them in their capitals ratio after deducting 20% tax. Bhanu received a total of Rs. 5400 out of total profits at the end of a year. Then, find Aman's commission.
(a) Rs. 1655 (b) Rs. 1625 (c) Rs. 1695
(d) Rs. 1745 (e) None of the above

Direction (66-70): Given pie charts shows percentage distribution of quantity of waste (org + wet) produced (in Kg) on five days and percentage distribution of quantity of wet waste produced (in kg) on five days.





Waste (Dry + Wet) = 800
Waste (Wet) = 500

66. Dry waste produced on Saturday is 20% more than dry waste produced on Thursday. What is the quantity of dry waste produced on Monday and Saturday together?
(a) 80 kg (b) 98 kg (c) 120 kg
(d) 100 kg (e) 95 kg

67. Dry waste produced on Tuesday is what percent of dry waste produced on Wednesday?
(a) $12\frac{1}{47}\%$ (b) $12\frac{12}{47}\%$ (c) $23\frac{23}{47}\%$
(d) $25\frac{25}{47}\%$ (e) $25\frac{23}{47}\%$

68. What is the ratio of the dry waste produced on Friday to wet waste produced on Monday and Wednesday together?
(a) 23 : 50 (b) 14 : 51 (c) 13 : 47
(d) 50 : 23 (e) None of these

69. If on Sunday total waste produced is 120% more than the dry waste produced on Thursday and dry waste produced on Sunday is 20% less than dry waste produced on Monday. Find the quantity of wet waste produced on Sunday?
(a) 30 kg (b) 38 kg (c) 36 kg
(d) 24 kg (e) None of these

70. Wet waste produced on Tuesday & Wednesday together is how much more than dry waste produced on Friday and Thursday together?
(a) 82 kg (b) 96 kg (c) 78 kg
(d) 88 kg (e) None of these

71. Retailer marks up an article $87\frac{1}{2}\%$ above its cost price and he earned Rs. 250 when he gives $33\frac{1}{3}\%$ discount. Had he sold that article at Rs 1200. Then, find the discount percent allowed by the shopkeeper.
(a) $12\frac{1}{2}\%$ (b) 20% (c) 36%
(d) 25% (e) 30%

72. Present age of Deepak is $16\frac{2}{3}\%$ more than Bhavya age. While 5 yrs ago, Deepak's age was twice than that of Bhavya's age at that time. Five years hence, twice the sum of ages of Deepak and Bhavya is equal to Harsh's age at that time. Then, find present age of Harsh (in years).
(a) 46 (b) 43 (c) 41
(d) 42 (e) None of these

73. Honey can do 30% work in 9 days, Abhishek can do 8% work in 4 days. Then in how many days they can complete 80% of the work
(a) 18 (b) 12 (c) None of these
(d) 10 (e) 15

74. A train coves certain distance in two parts. Distance covered in first part is 100% more than the distance covered in second part while speed of train is in the ratio 4 : 1 in first and second part respectively. If average speed of train is 20 km/hr then, find the speed of train in first part? (in kmph)
(a) 10 km/hr (b) 40 km/hr (c) 20 km/hr
(d) 25 km/hr (e) 60 km/hr

75. Find the probability of forming a 4 digit number which is divisible by 3 using 2, 4, 6 and 5, repetition of numbers are not allowed.
(a) 0! (b) 4! (c) 5!
(d) None of these (e) 3!

Direction (76-80): Study the given passage and answer the following questions.
There are three types of vehicles i.e. 3 Auto, 4 car & one truck which take rides. Distance covered by each type of vehicle per ride is same. Profit per ride of an auto and a car is given as Rs. 20 and Rs. 60 respectively. And total profit of truck in April month is given as Rs. 42000. Ratio of total ride per day of an auto to total ride per day of a car is 3 : 2. Ratio of per ride profit of a Truck to per ride profit of a Car is 70 : 27. And total profit is given as Rs 15920 per day.

76. What is difference in profit earned by all Cars and Truck in seven days?
(a) Rs. 56,440 (b) Rs. 54,120 (c) Rs. 64,120
(d) Rs. 72,240 (e) None of these

77. Profit made by Truck in two weeks is approximately what percent more or less than profit made in a week by all Auto?
(a) 29% more (b) 34% less (c) 24% more
(d) 39% less (e) 43% more

78. What is the ratio of number of rides by single Car in four weeks to number of rides by Truck in two weeks?
(a) 44 : 9 (b) 22 : 9 (c) None of these
(d) 88 : 9 (e) 11 : 9

79. What is the average of profit made by all Car and all Auto in a week?
(a) Rs. 50,820 (b) Rs. 48,240 (c) Rs. 56,220
(d) None of these (e) Rs. 64,120

80. What is the total profit of a single car, truck and auto in a day?
(a) Rs. 4860 (b) Rs. 5360 (c) Rs. 4240
(d) Rs. 5620 (e) None of these

ENGLISH LANGUAGE

Directions (81-90): Read the following passage carefully and answer the questions given below them. Certain words are given in bold to help you locate them while answering some of the questions.

At the first monetary policy statement of the Reserve Bank of India (RBI) for 2018-19, it seems impossible to believe that the previous bi-monthly on 7 February marked a high point in the relationship between the Union finance ministry and the RBI. There was on that date a regulatory add-on of a 180-day window of **forbearance** for payment dues from small borrowers, and abolition of loan limits in the MSME (medium, small and micro enterprises) segment. Those initiatives followed the supportive measures for the small-scale sector in the Union budget on 1 February, through the corporate tax cut, and additional funding for the Micro-units Development Refinance Agency (Mudra).

The appearance of team play was shattered after the Punjab National Bank (PNB) fraud broke in mid-February. The PNB fraud has variously been placed as having been in operation since 2011, perhaps even earlier. Union finance minister Arun Jaitley, speaking at the Economic Times Global Business Summit on 23 February, blamed the top management and auditors of PNB, but was also quoted as having added: "Regulators ultimately decide the rules of the game and regulators have to have a third eye which is to be **perpetually** open. But unfortunately in the Indian system, **we politicians are accountable, the regulators are not**."

RBI governor Urjit Patel came back forcefully on the occasion of a 14 March address at the Gujarat National Law University, pointing to the lack of ownership-neutrality in the Banking Regulation Act of 1949. The act as amended withholds the RBI from imposing certain types of penalties for errant conduct on public sector banks, like firing the chief executive officer, removing directors or **superseding** the board. The speech lists seven of them. Patel was right to have pointed them out, appropriately in an address to young entrants into the legal profession. That kind of unevenness in the regulatory landscape clearly has to be swept away.

The PNB fraud is said to have started rolling in 2011. As it happens, RBI that year appointed a high-level steering committee chaired by then deputy governor K.C. Chakraborty (a past chairman of PNB), to upgrade banking supervision to global best practices. Its report recommended that supervision be expanded in scope to go beyond a narrow focus on regulatory compliance or bank solvency, towards assessing the riskiness of a bank's operations, and its risk mitigation strategies. Independently, an inspection of select overseas branches of Indian banks was also conducted in May 2012, the previous one having been done in May 2008, but the findings are not publicly known.

The Chakraborty Committee report was submitted in June 2012. Its recommendations were accepted, and the supervisory system **overhauled** on to a new risk-based supervision (RBS) platform. Training was initiated for senior officers of the major banks. The new framework went into operation in 2013-14, renamed SPARC (supervisory programme for assessment of risk and capital). An initial set of 28 banks from across the ownership spectrum, accounting for 60% of total banking assets, was covered that year. PNB may well have been among them. Eight more banks were added over the next two years, and by 2016-17, all scheduled commercial banks were covered. SPARC specifically calls for ongoing interaction between banks and supervisors, not just periodic inspections. Finally, there is a further overlay since 28 February 2017 of a standing committee on cyber security.

In a parallel development starting in 2012-13, memoranda of understanding (MoUs) were signed with 16 overseas regulators, which the annual report for that year says led to "substantial progress in supervisory information sharing and cooperation within jurisdictions where Indian banks are operating". By the close of reporting year 2016-17, the number of such MoUs had expanded to 40, and there was also a statement of cooperation with three US financial regulators. Since overseas jurisdictions were another point from which the PNB fraud could have been spotted, these agreements do not seem to have led to information exchange of any diagnostic value.

81. What benefits have been provided by the government to small borrowers?
(I) Allocation of additional funds.
(II) Abrogating the loan limits in the MSME segment.
(III) Government has extended the time period for small borrowers for payment of their dues.
(a) Only (I)
(b) Only (III)
(c) Both (II) and (III)
(d) Both (I) and (III)
(e) All are correct

82. What can be inferred from the statement, "**we politicians are accountable, the regulators are not**."?
(a) Only politicians need to take decisions for regulating the banks.
(b) RBI should not be held responsible for their ineffective regulation against frauds in PSU banks.
(c) In Indian system, politicians are made responsible for any type of fraudulent activity.
(d) Both (b) and (c)
(e) All are correct

83. Which type(s) of unevenness has/have been pointed out by RBI governor?
(a) appointment of high level supervision committee
(b) growing fraudulent activities and scams in banks.
(c) uncontrolled regulation in banks.
(d) imposing penalty on PSBs.
(e) All are correct

84. What are the efforts made by RBI to avoid the future loss in banks?
(I) turning towards privatization of banks.
(II) providing training to bank officials.
(III) updating supervisory system
(a) Only (I)
(b) Only (III)
(c) Both (II) and (III)
(d) Both (I) and (III)
(e) All are correct

85. Identify the tone of the author with respect to the passage.
(a) eulogistic (b) informal (c) nostalgic
(d) critical (e) didactic

86. According to the passage, the new framework SPARC includes
(a) to upgrade banking supervision to global standards.
(b) interaction between banks and supervisors.
(c) enhancing cyber security of scheduled commercial banks
(a) Only (I)
(b) Only (III)
(c) Both (II) and (III)
(d) Both (I) and (III)
(e) All are correct

Directions (87- 88): Choose the word which is most similar in meaning to the word printed in bold in the context of the passage.

87. Perpetually
(a) abate (b) constantly (c) dissent
(d) harness (e) stride

88. Forbearance
(a) banish (b) cease (c) recuperate
(d) usurp (e) tolerance

Directions (89- 90): Choose the word which is most opposite in meaning of the word printed in bold in the context of the passage.

89. Overhaul
(a) ensue (b) accede (c) acquiesce
(d) ruin (e) hapless

90. Supersede
(a) herald (b) confide (c) concede
(d) relinquish (e) retain

Directions (91-95): In each question, the word at the top of the table is used in four different ways, numbered (a) to (d). Choose the option in which the usage of the word is INCORRECT or INAPPROPRIATE. If it is used correctly in every sentence choose option (e) as your choice.

91. APPRAISE
(a) The President appropriately **appraised** Russell and Financial Times readers that he had already signed into law the National Peace and Reconciliation Commission Act.
(b) In cooperation with other professionals, social workers will **appraise** the individual's needs.
(c) He coolly **appraised** the situation, deciding which person would be most likely to succeed.
(d) This prompted many employers to **appraise** their selection and recruitment policies
(e) All are correct.

92. CREDULOUS
(a) Because my brother is a **credulous** consumer, he is a salesperson's dream.
(b) Even though there was very little evidence, the **credulous** jury decided the defendant was guilty.
(c) Reference **credulous** sources to strengthen your argument.
(d) Because the **credulous** public wanted to believe the killer was off the streets, they never questioned the arrest of an innocent man.
(e) All are correct.

93. FLAUNT
(a) While many people love to **flaunt** their possessions, I prefer people that keep a low profile.
(b) The orchestra decided to **flaunt** convention/tradition, and wear their everyday clothes for the concert.
(c) Donald Trump loves to **flaunt** his wealth and grandiose, whenever he has the chance.
(d) Flavio was **flaunting** his tan in a pair of white trunks.
(e) All are correct.

94. UNBEARABLE
(a) A delegation of councillors is lobbying the Government because they say the noise is **unbearable**.
(b) This argument is **unbearable** from an intellectual, moral and practical standpoint.
(c) All I remember of childbirth was the **unbearable** pain and the relief when it was all over.
(d) The grief she felt over Helen's death was almost **unbearable**.
(e) All are correct.

95. LUXURIANT
(a) We've bought a wonderfully **luxuriant** carpet for our bedroom.
(b) In addition to its inferior size, the coyote is also shorter in the leg than the wolf, and carries a more **luxuriant** coat of hair.
(c) This stretch of land was once covered with **luxuriant** forest, but is now bare.
(d) He took no leading part in the war against the English, his energies being largely occupied with the satisfaction of his artistic and **luxuriant** tastes.
(e) All are correct.

Directions (96-102): In each of the following questions, various sentences are given and you have to choose the one which has some or any grammatical error in it. In the questions where option (e) is all are correct and all the sentences are grammatically correct choose option (e) as the correct choice.

96. (a) The potassium found in potatoes is said to reduce cholesterol level, blood pressure and controls heart problems.
(b) The calcium and magnesium content in potatoes can help ease rheumatism.
(c) Health experts and nutritionists say that turnip juice has more Vitamin C than orange juice.
(d) To watch even a single plant grow from seedling to small and big with more leaves each day and find them flowering and giving fruits can give you happiness untold.
(e) All are correct.

97. (a) Everyone who desires to participate in the good to be obtained must share in the act.
(b) As we have seen above, all must participate that none may be in a position to reproach the rest.
(c) While Dean had no desire to participate in the new and perilous sport of ice climbing, he didn't share Cynthia total perplexity at why a sane human being would even consider subjecting himself or herself to such uncomfortable danger.
(d) They were dressed like the others, and seemed to participate in the general joy.
(e) He being the best student in the class, Gopal was chosen to participate in the competition.

98. (a) There is no end of 'paddies' along this river, and I'm sure they cannot understand your lingo.
(b) Knowledge of regional language is necessary for bank officers because they are to understand what their customers say.
(c) This was one point at which we touched, and which went far to enable me to understand him.
(d) Am I to understand that you have no intention of respecting my wishes in this matter?
(e) All are correct.

99. (a) Today he revealed the fact that he was angry on me because I had not helped him.
(b) There was but one person likely to know all Mr. Topsparkle's secrets, and he would be unlikely to reveal them.
(c) The study revealed the toxic effects of the pollutant.
(d) It was almost as if he were shutting Felipa off before she could reveal something.
(e) All are correct.

100. (a) I paused for a moment to have a full view of this notorious criminal.
(b) I know that several of my readers may remind me of Sir Boyle Roche, whose bulls have become not only notorious, but proverbial.
(c) The man who was blind with the right eye was a notorious criminal of this area.
(d) Many of the pretended magnetizers were notorious libertines, who took that opportunity of gratifying their passions.
(e) All are correct.

101. (a) He won't lose his mate, even if he chooses to kill her rather than give her up.
(b) Her skin began to flush until it was pink enough to look human rather than the sleep of the dead.
(c) Ordinarily when in difficulty Renu prefers keeping her counsel rather than going about here and there for advice.
(d) Maybe he'd rather listen than talk.
(e) All are correct.

102. (a) Only 6 crore out of 29 crore persons holding permanent account number (PAN) file income tax returns at present.
(b) Only three out of a thousand are born with this rare disease.
(c) So, with a snort and a neigh and a whisk of his short tail he trotted off the roof into the air and at once began floating downward to the street.
(d) The mark of these technologies is that they are greeted with universal skepticism at first.
(e) All are correct.

Directions (103-107): Given below are five sentences of a paragraph in a jumbled fashion. Arrange the sentences to form a coherent paragraph and answer the following questions.
(A) It plans to use this for the Chandrayaan-II moon mission in the early months of 2019.
(B) The multi-band, multi-beam satellite can cater to the communication needs of people in Jammu and Kashmir and the Northeast.
(C) With a liftoff mass of 640 tonnes, the GSLV MkIII is the heaviest launch vehicle made in India, and GSAT29 is the heaviest satellite to take off from Indian soil.

(D) The Geosynchronous Satellite Launch Vehicle MarkIII (GSLV Mk III) launched GSAT29, an advanced communications satellite, into a geosynchronous transfer orbit where the satellite's closest approach to earth would be 190 km and the farthest 35,975 km.
(E) The Indian Space Research Organization has marked a big milestone by successfully testing its heavy-lift launcher while launching an advanced communication satellite.

103. What should be the last sentence of the sequence?
(a) D (b) A (c) B
(d) C (e) E

104. What should be the SECOND sentence of the sequence?
(a) D (b) A (c) B
(d) C (e) E

105. What should be the FOURTH sentence of the final sequence?
(a) A (b) E (c) D
(d) B (e) C

106. What should be the THIRD sentence of the final sequence?
(a) D (b) A (c) C
(d) B (e) E

107. What should be the FIRST sentence of the final sequence?
(a) C (b) D (c) B
(d) E (e) A

Directions (108-110): In the following questions, a sentence is divided into four parts consisting of a highlighted word in each part. Choose the option reflecting the word which is either misspelt or grammatically incorrect. If all the highlighted words are correct, choose option (e) i.e. "all are correct" as your answer choice.

108. The **Monetry** Policy Committee / of India is a committee of the **Reserve** Bank of India/ that is **responsible** for fixing the / benchmark **interest** rate in India.
(a) Monetry (b) Reserve (c) Responsible
(d) Interest (e) All are correct

109. **Trade** wars can easily / lead to **confrontation**, which may / result in **impulsive** / **behviour** and misjudgment.
(a) Trade
(b) Confrontation
(c) Impulsive
(d) Behviour
(e) All are correct

110. Saudi Arabia **signalled** its discomfort / with the **faling** prices / and **hinted** at a fresh cut / of one million **barrels** a day.
(a) Signalled (b) Faling (c) Hinted
(d) Barrels (e) All are correct

Directions (111-120): In the following passage there are blanks, each of which has been numbered. These numbers are printed below the passage and against each, five options are given. Find out the appropriate word which fits into the blank appropriately.

The theory that authoritarian governments can **___(111)___** policy consensus more easily than multiparty democracies holds some **___(112)___**. Critical reforms in a country like India are often **____(113)___** by the political conflict **____(114)____** in the democratic process. But if that were the whole story, then all dictatorships would be economic powerhouses. The case of Asia's hyper-growth economies suggests what is important isn't **_____(115)____** itself, but what policies the autocrat chooses to impose—and, more importantly, to whom he listens.

Historically, Asia's most successful strongmen have all benefited from **_____(116)____** sound economic guidance. In South Korea, long-serving ruler Park Chung-hee **____(117)____** that top economic posts be filled by highly **____(118)____** economists and other professionals. As one study put it, "Though political agencies in the early Park regime were **_____(119)____** by the military, economic agencies generally were not. Rather, under Park the **____(120)____** of economics experts in the Korean government rose considerably."

111. (a) impose (b) deliver (c) give
(d) urge (e) demand

112. (a) fault (b) belief (c) merit
(d) payment (e) attraction

113. (a) enlightened (b) clasp (c) abet
(d) joined (e) stymied

114. (a) invested (b) engrained (c) chisel
(d) defined (e) erode

115. (a) autocracy (b) calamity (c) racism
(d) democracy (e)brutality

116. (a) commonly (b) remarkably (c) odd
(d) higher (e) violently

117. (a) endured (b) acquired (c) insisted
(d) pretended (e) argued

118. (a) amateurish (b) master (c) whole
(d) trained (e) expert

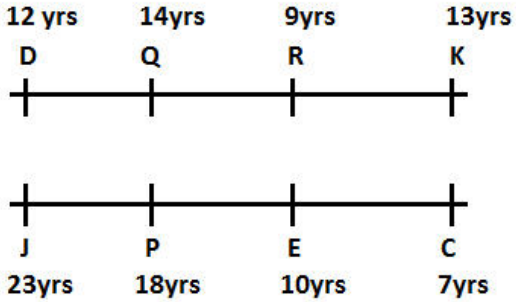
119. (a) followed (b) ordered (c) oppressed
(d) direct (e) dominated

120. (a) feature (b) report (c) status
(d) phase (e) place

Solutions

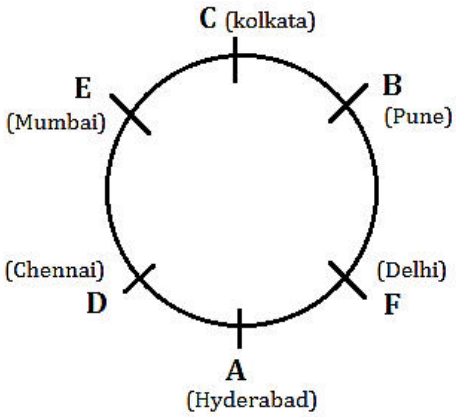
REASONING ABILITY

Directions (1-5):



1. (d); 2. (a); 3. (c);
4. (e); 5. (b);

Directions (6-10):



6. (c); 7. (b); 8. (a);
9. (d); 10. (c);

Directions (11-15):

Designation	Person	City
Clerk	K	Shimla
PO	P	Mangalore
AM	M	Kochi
MG	N	Thrissur
DGM	J	Gwalior
GM	L	Cuttack

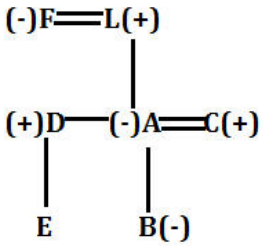
11. (a); 12. (d); 13. (d);
14. (a); 15. (e);

Directions (16-18):

G > F > C > E > H(9 litre) > D

16. (d); 17. (b); 18. (a);

Directions (19-20):



19. (d); 20. (b);

Directions (21-25):

Persons
L
N
T
H
R
M
G
A
Q
C
B

21. (b); 22. (d); 23. (a);
24. (a); 25. (c);

Directions (26-29):

26. (b); From I,
> N > > > & O > P/Q , M >P
From II,
O > P > Q > N > M

27. (e); From I and II,

28. (c); From I,

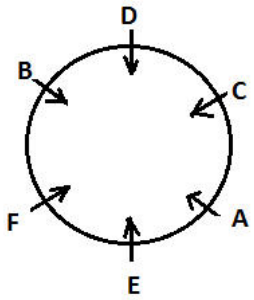
Floors	Person
5	V
4	W
3	U
2	X
1	Y

From II,

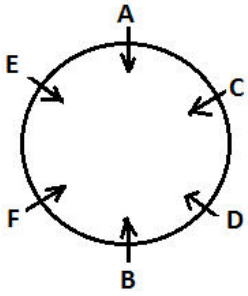
Floors	Person
5	U
4	V
3	W
2	X
1	Y

29. (d); From I,

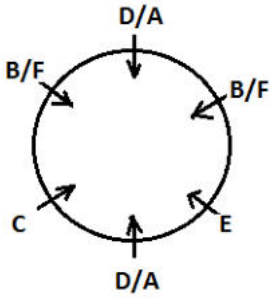
Case 1



Case 2

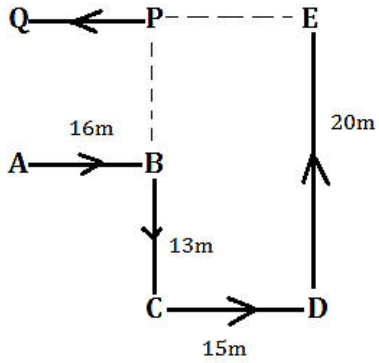


From II,



30. (c); 25 wrong 39 sing 60 pen 84 full.

Directions (31-34):



31. (e); 32. (c); 33. (b);

34. (e); 35. (e);

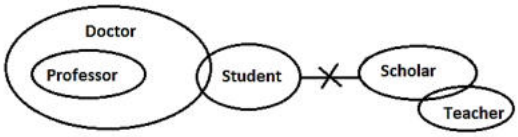
Directions (36-39):

Month	Person 1	Person 2	Person 3
January	Q (19)	S (27)	P (30)
June	T (25)	V (26)	U (29)
December	X (16)	W (18)	R (31)

36. (e); 37. (d); 38. (b);

39. (a);

40. (e);



QUANTITATIVE APTITUDE

41. (a); Let total no. of mails received in inbox of K be 'a'.
Average no. of mails received in inbox by X, Y & K = $\frac{750}{100}$ × (average no. of spam mails received by user X, Y and K)

$\frac{725+840+a}{3} = \frac{750}{100} \times \left(\frac{88+82+92}{3}\right)$

$1565 + a = \frac{750}{100} \times 262$

a = 1965 – 1565 ⇒ a =400

Required total = 400 + 92 = 492

42. (a); Inbox mails read by user Z = $\frac{125}{100} \times 92 = 115$

Required % = $\frac{115}{800} \times 100 = 14.375\%$

43. (d); Inbox mails read by user X & Y together

$= \frac{725}{100} \times 68 + \frac{840}{100} \times 65 = 493 + 546 = 1039$

Required difference = 1039 – (88 + 82)

= 869 more

44. (e); Total mails received in inbox by K = 3 × 88 = 264

Total mails received by K = 264 + 92 = 356

Total no. of inbox mails read by user X

$= 725 \times \frac{68}{100} = 493$

Required % = $\frac{356}{493} \times 100 \approx 72\%$

45. (d); Inbox mails which are read by user Z

$= 800 - \frac{250}{100} \times 88 = 580$

Required average = $\frac{580+840\times\frac{65}{100}}{2}$

$= \frac{580+546}{2} = \frac{1126}{2} = 563$

46. (e); From I & Ii

$\frac{1}{x} \sim \frac{1}{y} = \frac{8}{3}$, xy = 3

But it is not given that either x is greater or y

∴ we cannot determine.

47. (d); From I
2 men = 3 women
From II
16 men can complete the work in 10 days
∴ From I and II no. of women can be find.

48. (d); From I & II
∠DBC = ∠CDB
∠CDB = ∠DAB + ∠ABD
∠ABD = ∠CDB – ∠DAB
∠ABD = ∠DBC – ∠DAB
∠ABD = (∠ABC – ∠ABD) – ∠DAB
2∠ABD = ∠ABC – ∠DAB (∠DAB = ∠BAC)
2∠ABD = 30
∴ ∠ABD = 15°.

49. (b); From I
Sum cannot be find out as rate is not given.
From II
Difference = $\frac{PR^2}{100^2}$ [P → Sum, R → Rate]
P = Rs. 10,000
∴ CI can be find out.

50. (e); **From I & II**
Cannot be determined even after both statement.

51. (a); Required plot = $\frac{1800\times2200}{2400}$ = 1650 sq.feet

52. (d); Required price per sq. feet in 2017
= $2400 \times \frac{120}{100}$ = Rs. 2880

53. (c); Required ratio = $\frac{1840\times2600}{1640\times1000}$ = 598 : 205

54. (e); Required difference
= $2240 \times 1400 - 2240 \times 1400 \times \frac{3}{4}$
= $2240 \times 1400 \left[\frac{1}{4}\right]$ = Rs. 784000

55. (d); Required average
= $\frac{2420\times2400+1640\times1800}{2}$ = 4380000 = Rs. 43.8 lakh

56. (d); Let the tens digit and units digit of first number be 'x_1 & 'y_1' respectively.
So, original number = $10 \times x_1 + y_1$
Then, reversed number = $10 \times y_1 + x_1$
Let the tens digit and units digit of second number be 'x_2' & 'y_2' respectively.
So, second number = $10 \times x_2 + y_2$
ATQ,
$10 \times y_1 + x_1 = \frac{3}{4}(10 \times x_2 + y_2)$ ... (i)
Now,
$(x_2)^2 - (y_2)^2 = 20$
$(x_2 + y_2)(x_2 - y_2) = 20$ ... (ii)
Now, equation (ii) can have factors (10 × 2) (5 × 4) & (20 × 1)
But by substitution, one will find that only (10 × 2) satisfies the equation (ii)
Now,
$(x_2 + y_2) = 10$ ... (iii)
& $x_2 - y_2 = 2$ ... (iv)
Adding (iii) & (iv)

$$\begin{aligned} x_2 + y_2 &= 10 \\ x_2 - y_2 &= 2 \\ \hline 2x_2 &= 12 \\ x_2 &= 6 \end{aligned}$$

Put value of = x_2 in (iii)
$6 + y_2 = 10$
$y_2 = 4$
So, second number = 10 × 6 + 4 = 64
Put, value of x_2 & y_2 in (i)
$10 \times y_1 + x_1 = \frac{3}{4}(64) = 48$
So, original number = 84

57. (d); When 20% of petrol is replaced by kerosene oil:
Quantity of petrol in the mixture = $25 - 25 \times \frac{20}{100}$
= 20 liters
Quantity of kerosene oil in the mixture = 25 – 20 = 5 liters
When 30% of mixture is replace by kerosene oil:
Quantity of petrol in the mixture = $20 - 20 \times \frac{30}{100}$
= 14 liters
Quantity of kerosene oil in the mixture = 25 – 14 = 11 liters
Required % = $\frac{14}{25} \times 100 = 56\%$

58. (a);

	Days	Efficiency	Total work
Aman	36 days	5 units/day	180 units (LCM)
Aman + Bhanu	20 days	9 units/day	

= Bhanu,s efficiency = 9 – 5
= 4 units/day
Chaman's efficiency = $\frac{60}{100} \times 5$= 3 units/day
Required days = $\frac{180}{(5+4+3)} = \frac{180}{12}$ = 15 days

59. (b); Let speed of the boat be 'a' km/hr and speed of stream be 'b' km/hr.
And let time taken by boat to reach lighthouse during upstream and during downstream be '2x' & 'x' respectively.
ATQ,
$a + b = \frac{30}{x}$
$\Rightarrow x = \frac{30}{(a+b)}$ ... (i)
And $(a - b) = \frac{30}{2x}$
$\Rightarrow x = \frac{30}{2(a-b)}$ ... (ii)
From (i) & (ii)
$\frac{30}{(a+b)} = \frac{30}{2(a-b)}$
2a – 2b = a + b
a = 3b
$\frac{a}{b} = \frac{3}{1}$
a : b = 3 : 1

60. (b); Let radius of hemisphere bowl & conical tent be 'r'
And, slant height of conical tent be 'l'
Sol.
$\frac{2\pi r^2}{\pi r \ell} = \frac{6}{5} \Rightarrow \frac{2r}{\ell} = \frac{6}{5} \Rightarrow \frac{r}{\ell} = \frac{3}{5}$
Let radius and slant height be '3x' & '5x' respectively.
$h = \sqrt{\ell^2 - r^2}$
$h = \sqrt{(5x)^2 - (3x)^2}$
$h = 4x$
Now, required ratio $= \frac{\frac{1}{3}\times\pi\times(3x)^2\times 4x}{\frac{2}{3}\times\pi\times(3x)^3}$
$= \frac{4x}{3}\times\frac{3}{2\times 3x} = \frac{12x}{18x} = \frac{2}{3} \Rightarrow 2:3$

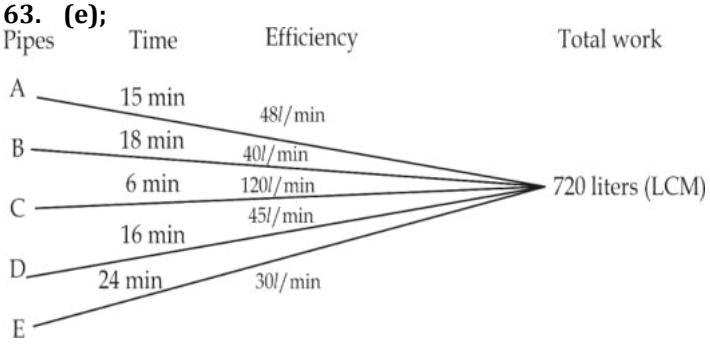
61. (e); Let number of male & female employees is 'x' & 'y' respectively.
ATQ,
$x + y = 100$ ... (i)
And,
$70x + 45y = 60 \times 100$
$70x + 45y = 6000$
$14x + 9y = 1200$ ... (ii)
Multiply (i) by 9
$9x + 9y = 900$ ... (iii)
Subtract (iii) from (ii)

$$\begin{aligned} 14x+9y &= 1200 \\ 9x+9y &= 900 \\ \hline 5x &= 300 \\ x &= 60 \end{aligned}$$

Put value of x in (i)
$60 + y = 100$
$y = 40$
Required ratio $= \frac{60}{40} = \frac{3}{2} = 3:2$

62. (c); Let marked price of a shirt be Rs. x.
ATQ,
$8x + 150 \times 4 = 5000$
$8x = 4400$
$x =$ Rs. 550
Total MP of 12 shirts $= 12 \times 550 =$ Rs 6,600
Required % $= \frac{6600-5000}{6600}\times 100 = \frac{1600}{66} = 24\frac{8}{33}\%$

63. (e);



So, going through options, you will find that the tank will not be filled exactly 50% in any of the options.

64. (a); Total number of outcomes = 36
P(E) = {(1, 3) (2, 2) (2, 6) (3, 1) (3, 5) (4, 4) (5, 3), (6, 2) (6, 6)
So, Required probability $= \frac{P(E)}{N} = \frac{9}{36} = \frac{1}{4}$

65. (b); Let profit before deducting Aman's commission and tax be Rs x
Ratio of capitals of Aman & Bhanu
$= \frac{6\times 12000+12\times 8000}{12\times 12000} = \frac{168000}{144000} = 7:6$
Profit after deducting tax $= \left(x - \frac{10}{100}\times x\right)\times\frac{80}{100}$
$= \frac{9x}{10}\times\frac{80}{100} = \frac{18x}{25}$
Bhanu's share $= \frac{18x}{25}\times\frac{6}{13}$
$5400 = \frac{18x}{25}\times\frac{6}{13}$
$x = 5400\times\frac{25}{18}\times\frac{13}{6} =$ Rs. 16,250
So, Aman's commission $= 16{,}250\times\frac{10}{100} =$ Rs. 1,625

66. (b); Dry waste produced on Thursday $= \frac{800\times 15}{100} - \frac{16\times 500}{100}$
$= 120 - 80 = 40$ kg
Dry waste produced on Saturday $= \frac{120}{100}\times 40$
$= 48$ kg
Dry waste produced on Monday $= \frac{20\times 800}{100} - \frac{22\times 500}{100}$
$= 160 - 110 = 50$ kg
Total sum $= 50 + 48 = 98$ kg

67. (d); Dry waste on Tuesday $= \frac{18\times 800}{100} - \frac{24\times 500}{100}$
$= 144 - 120 = 24$ kg
Dry waste on Wednesday $= \frac{23\times 800}{100} - \frac{18\times 500}{100}$
$= 184 - 90 = 94$ kg
Required % $= \frac{24}{94}\times 100 = \frac{1200}{47}\% = 25\frac{25}{47}\%$

68. (a); Dry waste on Friday $= \frac{24\times 800}{100} - \frac{20\times 500}{100} = 92$ kg
Wet waste on Monday and Wednesday together $= \frac{22+18}{100}\times 500 = 200$ kg
Ratio $= \frac{92}{200} = \frac{23}{50}$

69. (e); Dry waste produced on Thursday
$= \frac{15\times 800}{100} - \frac{16\times 500}{100} = 40$ kg
Total waste produced on Sunday $= 40\times\frac{220}{100} = 88$ kg
Dry waste produced on Monday
$= \frac{20\times 800}{100} - \frac{22\times 500}{100} = 160 - 110 = 50$ kg
Dry waste produced on Sunday $= \frac{4}{5}\times 50$
$= 40$ kg
Wet waste produced on Sunday = 88 – 40 = 48 kg

70. (c); Wet waste on Tuesday & Wednesday together
$= \frac{(24+18)}{100}\times 500 = 210$
Dry waste on Thursday and Friday together
$= \frac{(24+15)}{100}\times 800 - \frac{(20+16)}{100}\times 500 = 132$ kg
Required difference = 210kg – 132kg = 78 kg

71. (c); ATQ,
$87\frac{1}{2}\% = \frac{7}{8}$
Let, CP = 8x
Then MRP = (8 + 7) = 15x

And SP $= 15x \times \frac{2}{3} = 10x$
Profit = 10x – 8x = 2x
ATQ, 2x = 250 ⇒ x = 125
S.P. = 1250, M.R.P = 1875
If he sold article at Rs 1200 the discount %
$= \frac{1875-1200}{1875} \times 100 = \frac{675}{1875} \times 100 = 36\%$

72. (c); Ratio of present age of Deepak to Bhavya = 7 : 6
Ratio of age of Deepak to Bhavya 5 years ago = 2 : 1
Let, age of Deepak and Bhavya 5 years ago were = 2x and x respectively.
ATQ,
$\frac{2x+5}{x+5} = \frac{7}{6} \Rightarrow 12x + 30 = 7x + 35$
x = 1
present age of Harsh = 2(2x + 10 + x+ 10) – 5
= 46 – 5 = 41 years

73. (e); Honey can do complete work in $= \frac{9}{30} \times 100$
$= 30$ days
Abhishek can do complete wok in $= \frac{4}{8} \times 100$
= 50 days
Let total work = 150
Ratio of efficiency of Harry to Abhishek $= \frac{150}{30} : \frac{150}{50}$
= 5 : 3
Time period $= \frac{150 \times \frac{80}{100}}{8} = 15$ days

74. (b);

		I part	II part
let	Distance	2x	x
let	Speed	4y	y

Average speed $= \frac{\text{total Distance}}{\text{Total Time}} = \frac{3x}{\frac{2x}{4y}+\frac{x}{y}} = 20$
On solving y = 10
Speed in Ist part = 40 kmph

75. (d); A number is divisible by 3, only when sum of its digits is divisible by 3. But sum of 2, 4, 5 & 6 is 17. So, no 4 digits number can be formed using 2, 4, 5 & 6.

Sol (76-80)-
Let total ride per day of an auto and total ride per day of a car be 3x and 2x respectively.
ATQ,
$3 \times 20 \times 3x + 4 \times 60 \times 2x + \frac{42000}{30} = 15920$
180x + 480x + 1400 = 15920
660x = 14520
x = 22
∴ No. of rides per day taken by an Auto & a Car is 66 & 44 respectively.
Let no. of rides of truck per day be a
$\frac{\text{profit per ride of truck per day}}{\text{profit per ride of a car per day}} = \frac{\frac{1400}{a}}{60} = \frac{70}{27}$
∴ a = 9
∴ no. of rides taken by truck per day = 9

Vehicle	No. of Vehicle	Total no. of rides per day per vehicle	profit in a day
Car	4	44	10560
Auto	3	66	3960
Truck	1	9	1400

76. (c); Required difference $= (10560 - 1400) \times 7$
= Rs. 64,120

77. (a); Profit of Truck in two weeks = 1400 × 14
= Rs. 19600
Profit of all auto in a week = 3960 × 7 = Rs. 27720
Required % $= \frac{27720-19600}{27720} \times 100$
$= \frac{812000}{27720} \approx 29\%$ more

78. (d); Required ratio $= \frac{44 \times 28}{9 \times 14} = 88 : 9$

79. (a); Required Average $= \frac{1}{2}[10560 \times 7 + 3960 \times 7]$
= Rs. 50,820

80. (b); Required total $= \frac{10560}{4} + \frac{3960}{3} + \frac{1400}{1}$
= 2640 + 1320 + 1400 = Rs. 5360

ENGLISH LANGUAGE

81. (e); All the sentences are correct. Government in the budget this year has announced the additional funding to Mudra, add-on of a 180-day window of forbearance for payment dues from small borrowers and abolition of loan limits in the MSME. Hence option (e) is the correct choice.

82. (d); As mentioned in second paragraph of the passage that finance minister highlighted the responsibilities of regulators of PSU banks i.e. RBI. Here unfortunately determines the negative point that politicians are made responsible for frauds and scams in banks rather than regulators.
Hence option (d) is the correct choice.

83. (d); Refer the third paragraph of the passage.

84. (c); Refer the first few lines of second paragraph "Training was initiated for senior officers of the major banks." "the supervisory system overhauled on to a new risk-based supervision (RBS) platform.".

85. (d); The author has given deep analysis of decision of RBI governor Urjit Patel regarding monetary policy, with a neutral outlook. Hence '**critical**' is the correct tone of the author.

86. (e); All of the sentences are correct. Refer to fourth and fifth paragraphs of the passage.

87. (b); **Perpetually** means never ending or changing, having same meaning as **constantly**.
Abate means becoming less intense.
Dissent means disagreement.
Stride means a decisive step, advance, proceed.

88. (e); **Forbearance** means patient self-control; restraint and tolerance, having same meaning as **tolerance**.
Recuperate means recover or regain.
Usurp means take illegally or by force.

89. (d); **Overhaul** means take apart (a piece of machinery or equipment) in order to examine it and repair it if necessary. Hence it has the opposite meaning to **ruin**.
Ensue means happen or occur afterwards or as a result.
Acquiesce means accept something reluctantly but without protest.
Hapless means unfortunate.

90. (e); **Supersede** means take the place of (a person or thing previously in authority or use); supplant. Hence it has the opposite meaning to **retain**.
Relinquish means voluntarily cease to keep or claim; give up.
Concede means admit or agree that something is true after first denying or resisting it.
Herald means a person or thing viewed as a sign that something is about to happen.
Confide means tell someone about a secret or private matter while trusting them not to repeat it to others.

91. (a); Option (a) is incorrect as apprised should be used here.
Appraise means to ascertain the value of and does not mean to apprise or to inform. Correct: "I appraised the jewels." / "I apprised him of the situation."

92. (c); Option (c) is incorrect as credible should be used in place of credulous.
Credible means believable and does not mean credulous or gullible. Correct: "His sales pitch was not credible." / "The con man took advantage of credulous people."

93. (b); In option (b) the use of flaunt is incorrect and must be replaced with flout.
Flaunt means to show off and does not mean to flout. Correct: "She flaunted her abs." / "She flouted the rules."

94. (b); In option (b) the use of unbearable is incorrect and untenable should be used instead.
Untenable means indefensible or unsustainable and does not mean painful or unbearable. Correct: "Now that all the facts have been revealed, that theory is untenable." / "Her death brought him unbearable sadness."

95. (d); Option (d) is incorrect as luxuriant should be replaced with luxurious.
Luxuriant means abundant or florid and does not mean luxurious. Correct: "The poet has a luxuriant imagination." / "The car's fine leather seats were luxurious."

96. (e); All the given sentences are grammatically correct.

97. (e); In this sentence, use of 'He' is superfluous as the **subject** of '**Being'** is 'Gopal'. **It is to be noted that whenever a sentence containing Participle is used with only one Subject which does dual work, then a Subject is not required before Participle.**
e.g. Being tired, he sat down. [= As he was tired, he sat down.]

98. (b); Replace "Knowledge of regional language" by "The knowledge of a regional language" as generally "**The + Noun + of + Noun**" is used. Also, '**regional language**' is a **Singular Countable Noun**. So '**a**' will be used before 'regional language'. Hence the correct form of the sentence should be - **The knowledge of a regional language**.

99. (a); Use 'with' in place of 'on' as "**angry with somebody**" and "**angry at something**" are the correct usage.
e.g. He is angry with you.
He is angry at your behavior.

100. (c); Replace 'with' by 'an' as "**blind in the right eye/the left eye**" is used while "**blind with both the eyes**" is the correct usage.

101. (c); Use 'to' in place of 'rather than' as when **two nouns or gerunds** are compared using the word '**prefer'**, the preposition '**to'** is used. e.g. She preferred playing to gossiping.
However when '**prefer'** is used to compare **two infinitives**, '**rather than**' is used instead of '**to'**. e.g. We preferred to read rather than write.

102. (e); All the given sentences are grammatically correct.

103. (c); The correct arranged form of the given paragraph is EADCB. Hence (B) must be the last sentence of the paragraph. This is because it concludes the paragraph which talks about GSLV Mk III that is it talks about its applications and uses among which one is catering to the needs of the people in J&K and the Northeast by the help of communication.

104. (b); Option (b) is the appropriate choice as the answer. (A) is the second statement of the paragraph when it will be arranged in a coherent way. The sentence starts with 'It' which means something has to be mentioned beforehand about which we are talking so it will be second sentence that is ISRO which plans to use this for the Chandrayaan-II moon mission in the early months of 2019.

105. (e); Option (e) is the correct choice as the answer. (C) will be the fourth sentence when the paragraph is arranged in a coherent way. The sentence that precedes sentence (C) is sentence (D) which mentions about satellite GSLV where the satellite's closest approach to earth would be 190 km and the farthest 35,975 km. So after (D) it must be (C),as statement (C) refers the details about GSLV.

106. (a); Option (a) is the most correct choice as the answer. The correct sequence of arrangement of paragraph is EADCB.

107. (d); Option (d) is the most suitable choice as the answer of the option. The first sentence is the opening line of the sentence which gives introduction to the paragraph which is that The Indian Space Research Organization (ISRO) has marked a big milestone by successfully testing its heavy-lift launcher while launching an advanced communication satellite.

108. (a); The highlighted word in the first part is incorrectly spelled as "Monetry". However, the precise spelling of the word in "Monetary" and it means relating to money or currency. All the other words have been spelt correctly and are in appropriate grammatical syntax. Hence, option (a) is the most suitable answer choice.

109. (d); The highlighted word in the fourth part is incorrectly spelled as "behviour". However, the precise spelling of the word in "behaviour" or "behavior" and it means the way in which one acts or conducts oneself, especially towards others. All the other words have been spelt correctly and are in appropriate grammatical syntax. Hence, option (d) is the most suitable answer choice.

110. (b); The highlighted word in the first part is incorrectly spelled as "faling". However, the precise spelling of the word in "falling" and it means move from a higher to a lower level, typically rapidly and without control. All the other words have been spelt correctly and are in appropriate grammatical syntax. Hence, option (b) is the most suitable answer choice.

111. (a); "**impose**" is the most appropriate word in the context of its meaning to the sentence. It is to be noted that the sentence is talking about the authoritarian governments, so the word "impose" makes the sentence more meaningful. Hence option (a) is the correct choice.
Impose means force (an unwelcome decision or ruling) on someone.
Urge means try earnestly or persistently to persuade (someone) to do something.

112. (c); "**merit**" is the most appropriate word that fits into the provided space adding meaning to the sentence. Other words do not give a contextual essence to the sentence. Hence option (c) is the correct choice.
Merit means the quality of being particularly good or worthy, especially so as to deserve praise or reward.

113. (e); "**stymied**" is the most appropriate word that fits perfectly into the provided space. The word "**stymied**" means **prevented or hindered the progress of**. Other words are contextually incorrect. Hence option (e) is the correct choice.
Clasp means hold (someone) tightly.
Abet means encourage or assist (someone) to do something wrong, in particular to commit a crime.

114. (b); "**engrained**" is the most appropriate word that fits perfectly into the provided space. The word "**engrained**" means **firmly fixed or established (a habit, belief, or attitude) in a person**. Other words are contextually incorrect. Hence option (b) is the correct choice.
Chisel means cut or shape (something) with a chisel.
Erode means gradually destroy or be gradually destroyed.

115. (a); "**autocracy**" is the most appropriate word that fits perfectly into the provided space. The word "**autocracy**" means **a system of government by one person with absolute power**. The word "**autocrat**" in the latter part of the sentence suggests that "**autocracy**" would give the most logical meaning to the sentence. Hence option (a) is the correct choice.

116. (b); "**remarkably**" is the most appropriate word that fits into the provided space adding meaning to the sentence. Other words do not give a contextual essence to the sentence. Hence option (b) is the correct choice.
Remarkably means in a way that is worthy of attention.

117. (c); "**insisted**" is the most appropriate word that fits into the provided space adding meaning to the sentence. Other words do not give a contextual essence to the sentence. Hence option (c) is the correct choice.
Insist means demand something forcefully, not accepting refusal.
Endure means remain in existence; last.
Acquire means buy or obtain (an asset or object) for oneself.
Pretend means behave so as to make it appear that something is the case when in fact it is not.

118. (d); "**trained**" is the most appropriate word that fits into the provided space adding meaning to the sentence. It is to be noted that the expression "**highly trained economists and other professionals**" makes the sentence logically meaningful. Hence option (d) is the correct choice.
Amateurish means done in an unskillful or inept way.

119. (e); "**dominated**" is the most appropriate word that fits into the provided space adding meaning to the sentence. Other words do not give a contextual essence to the sentence. Hence option (e) is the correct choice.
Oppress means cause distress or anxiety to.
Dominate means have power and influence over.

120. (c); "**status**" is the most appropriate word that fits into the provided space adding meaning to the sentence. Other words do not give a contextual essence to the sentence. Hence option (c) is the correct choice.
Status means relative social or professional position; standing.
Phase means a distinct period or stage in a process of change or forming part of something's development.

Mock 45

IBPS RRB Clerk Mains 2017

REASONING ABILITY

Directions (1-5): Study the given information carefully to answer the given questions.
A, B, C, D, E, F and G are seven different mobile phones which has different storage spaces, ie 256mb, 500mb, 1gb, 2gb, 8gb, 16gb and 32gb but not necessarily in the same order.
The mobile phone which has 256mb storage space is immediately above A. There are only two mobile phones between D and the mobile phones which have of 256mb storage space. The mobile phones which has 1gb storage space is above D but not immediately above D. Only three mobile phones are between C and the mobile phones which have 1gb storage space. The mobile phones which has 32gb storage space is immediately above C. The mobile phones which is of 2gb storage space is immediately above the mobile phones G. Only one mobile phone is there between mobile phone B and mobile phone E. Mobile phone B is above E. Neither mobile phone B nor mobile phone A is of 8gb storage space. Mobile phone A has not 500mb storage space. There is only one mobile phone between mobile phone E and G. Mobile phones G is not of 16gb or 8gb storage space. Neither mobile phone D nor G is of 500mb storage space. Mobile phone G is not below mobile phone A.

1. How many mobile phones are there between mobile phone D and mobile phone G?
(a) One (b) Two (c) Three
(d) Four (e) None

2. What is the storage space of mobile phone F?
(a) 32gb (b) 256mb (c) 1gb
(d) 2gb (e) Can't be determined

3. Find the pair of storage space and mobile phone which is not correctly matched.
(a) B-2gb (b) F-1gb (c) A-16gb
(d) G-256mb (e) None of these

4. Which of the following conditions is correct regarding 8gb storage space with respect to E?
(a) There is one mobile phone between E and 8gb storage space mobile phones.
(b) E is immediately above 8gb storage space mobile phone.
(c) 8gb storage space is related to the mobile phone immediately above E.
(d) All the above are true
(e) None of the above is true

5. Which of the following storage spaces belongs to 'A'?
(a) 256mb (b) 2gb (c) 8gb
(d) 500mb (e) None of these.

Directions (6-8): In each of the question below are given three statements followed by three conclusions numbered I, II and III. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follow(s) from the given statements, disregarding commonly known facts:

6. **Statements:** Some Gujrat are karnal.
Some karnal are haryana.
Some haryana are delhi.
Conclusions: I. Atleast some delhi are Gujrat.
II. There is a possibility that all delhi are karnal.
III. No delhi is karnal.
(a) None follows (b) I and II follow
(c) Only II follows
(d) Only either II or III follows
(e) Only I and either II or III follow

7. **Statements:** All doc are pdf.
Some pdf are ppt.
All ppt are xls.
Conclusions: I. At least some xls are pdf.
II. Some pdf are doc.
III. All xls are doc is a possibility.
(a) I and II follow (b) I and III follow
(c) II and III follow (d) All follow
(e) None of the above

8. **Statements:** All windows are microsoft.
All ios are microsoft
All microsoft are android.
Conclusions: I. All windows are android is a possibility.
II. All ios is android.
III. At least some android are microsoft.
(a) I and II follow (b) I and III follow
(c) II and III follow (d) All follow
(e) None of the above

Directions (9-13): Study the following information carefuty to answer the given questions.
W, X, Y, Z, M, N and O going to three different malls GIP, DLF and SRS with at least two of them in any of these malls. Each of them has a favourite colour–Green, Blue, Red, White, Black, Violet and Purple. X going to DLF mall with M.

M's favourite colour is Purple. Those who went to GIP mall do not like Green and White colour. The one who likes Blue colour is going only with O in SRS mall. The one who's favourite Colour is Black does not go in the same mall with either M or O. W does not go in DLF mall. W likes Violet colour. Z and N going in the same mall. N does not like Red colour. The one who's favourite colour is White does not go in DLF mall.

9. W, Z and N are going in which mall?
(a) Cannot be determined
(b) GIP (c) DLF
(d) SRS((e) None of these

10. What is the favourite colour of M?
(a) Violet (b) White (c) Purple
(d) Black (e) None of these

11. Which of the following combinations is true?
(a) W–SRS–Blue (b) O–GIP–Black
(c) N–SRS–White (d) Z–GIP–Red
(e) None of these

12. Y goes in which mall?
(a) GIP (b) DLF (c) SRS
(d) Cannot be determined (e) None of these

13. Whose favourite colour is White?
(a) X (b) W (c) O
(d) Z (e) None of these

Directions (14-18): Following questions are based on the five three-digit given below.
519 328 746 495 837

14. If half of the second highest number is subtracted from the third highest number, what will be the value?
(a) 156 (b) 146 (c) 213
(d) 314 (e) None of these

15. If the positions of the first and the third digits in each of the numbers are interchanged, which of the following will be the second digit of the lowest number?
(a) 1 (b) 2 (c) 4
(d) 9 (e) 3

16. If in each number the third digit becomes the first digit, the first digit becomes the second digit and the second digit becomes the third digit, which of the following will be the second digit of the lowest number?
(a) 1 (b) 2 (c) 4
(d) 9 (e) 3

17. Which of the following represents the difference between the first and the second digits of the second highest number?
(a) 4 (b) 1 (c) 3
(d) 5 (e) None of these

18. If '1' is subtracted form the third digit of each number and '1' is added to the first digit of each number, which of the following will be the sum of the second and third digits of the second lowest number?
(a) 13 (b) 9 (c) 8
(d) 6 (e) None of these

Directions (19-20): Read the given information carefully and answer the given questions.
There are 5 persons A, B, C, D and E. B is to the northeast of E. D is 2km to the east of E, who is 6km to the west of A. C is to the northwest of D and in the line of EB. D is 4km the south of B.

19. What is the distance between D and A?
(a)6km (b)4km (c)3km
(d)2km (e)None of these

20. In which direction is A with respect to B?
(a)Southeast (b)Southwest
(c)Northeast (d)Northwest
(e)None of these

Directions (21-23): Study the following digit-letter-symbol sequence carefully and answer the questions given below:
R * T J L 2 $ D = M # 8 C % B < K 1 & A W ? P E + Q @ 7 F 6

21. How many such numbers are there in the above sequence, each of which is immediately preceded by a consonant and immediately followed by a symbol?
(a) None (b) One (c) Three
(d) Four (e) None of these

22. Which of the following is sixth to the left of eighteenth element from the left?
(a) % (b) C (c) 1
(d) 8 (e) None of these

23. If the above sequence is written in reverse order then which of the following will be sixth to the right of sixteenth element from the right end?
(a) M (b) A (c) B
(d) ? (e) None of these

24. If each of the odd position in the letter CAREFULLY is increased by 1 and each of the even position letter are decreased by 1 then which will be the new word?
(a)EZSDHTNKY (b)EZSDHTNKY
(c)DZSDGTMKZ (d)DYTFGTNKY
(e)None of these.

25. In a certain code, CHAMPION is written as NBIDMNHO. How is ELECTRON written in the code?
(a) FMDFMNQS (b) BDKDMNQS
(c) DFMFOPSU (d) DFMFMNQS
(e) None of these

Directions (26-30): Study the following information carefully and answer the given questions.
Five Movies- Go Goa, Chandni-Chawk to China, London Dreams, Chennai Express and Mumbai Metro are played in 5 halls-Golden, Diamond, platinum, Deluxe, and Galaxy in a PVR. These movies are rated by different stars-one, two, three, four and five. The show timing is also different for each movie, 9am, 12 noon, 3pm, 6pm, and 9pm.

- Chandni-Chawk to China is not played in Diamond or Galaxy hall.
- The show timing of Go Goa is not 6pm or 9pm while show timing of Chennai Express is 12 noon.
- Mumbai Metro is not one or four star movie but played in Diamond hall.
- London Dream and Chennai Express are neither played in Golden & Platinum hall nor two or four star movie. Five star rated movie is played at 9pm
- Three star rated movie is played in Galaxy. Five star rated movie is played in Deluxe hall.
- Four star rated movie is played immediate after Mumbai Metro.

26. Movie 'Go Goa' is rated as?
(a) One star (b) Two star
(c) Three star (d) Four star
(e) Five star

27. Which of the following statement is true?
(a) Two star rated movie is played in Deluxe hall
(b) Mumbai Metro is played at 3pm.
(c) Chennai Express is five star rated movie
(d) Chandni-Chawk to China is played in Platinum hall
(e) None of the above

28. Which of the following matching is correct?
(a) London Dream-four star
(b) Go Goa-five star
(c) Mumbai Metro-6pm
(d) Chennai Express-Galaxy hall
(e) More than one of the above

29. What is the timing of the movie which is played in Deluxe hall?
(a) 9 am (b) 12 noon (c) 3 pm
(d) 6 pm (e) 9 pm

30. Movie 'Mumbai Metro' is rated as?
(a) One star (b) Two star
(c) Three star (d) Four star
(e) Five star

Directions (31-32): Study the following information carefully and answer the questions given below:
Five family members V, W, X, Y and Z are sitting in a straight line facing north. Each of them somehow has a relation with V, who sits third to the right of his daughter. There are only two females in the family. X is an immediate neighbour of his mother. Y sits third to the right of Z, who sits at one end of the line. V sits with his wife. X is brother of W, who is niece of Z.

31. How is Z related to V?
(a) Father (b) Mother (c) Brother
(d) Can't be determined (e) None of these

32. How is Y related to W?
(a) Mother (b) Father (c) Brother
(d) Can't be determined (e) None of these

Directions (33-37): Study the information carefully and answer the question given below.
Eight persons-P, S, Q, R, U, B, J and C are sitting in a circle at equal distances. Three of them are facing opposite to center and other five are sitting facing the centre of the circle. Two persons are sitting between C and U and two are sitting between B and U. Q is sitting to the second left of J, who is facing the centre of the circle. S is facing the centre of the circle. S is sitting to the third right of B. R is not near to C. Q is sitting to the third left of R, who is second right of P, and among these three players one is facing opposite to the centre of the circle. U is not opposite to B and Q.

33. Which of the following sportspersons is facing to the opposite of the centre?
(a) B (b) R (c) U
(d) Q (e) None of these

34. Who is sitting third to the left of U?
(a) R (b) B (c) S
(d) C (e) None of these

35. If all the people change their positions with the person sitting opposite to them then who is now sitting second to the left of R?
(a) U (b) P (c) B
(d) C (e) None of these

36. Who is second right to J?
(a) B (b) C (c) S or B
(d) R or S (e) C or R

37. How many people are sitting between C and R, when counting in anticlockwise direction from R?
(a) Three (b) None (c) One
(d) Two (e) None of these

Directions (38-40): Each of the questions below consists of a question and three statements numbered I, II and III given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read all the three statements and Give answer:
(a) If the data in Statement I and II are sufficient to answer the question while the data in Statement III is not required to answer the question
(b) If the data in Statement I and III are sufficient to answer the question, while the data in Statement II is not required to answer the question

(c) If the data in Statement II and III are sufficient to answer the question, while the data in Statement I is not required to answer the question
(d) If even the data in Statement I, II and III together are not sufficient to answer the question.
(e) If the data in all the Statement I, II and III together are necessary to answer the question.

38. Who among A, B, C, D and E is driving the four wheeler?

(i) B and C are drunk.

(ii) D does not have the driving license.

(iii) D and C are sitting on the front row.

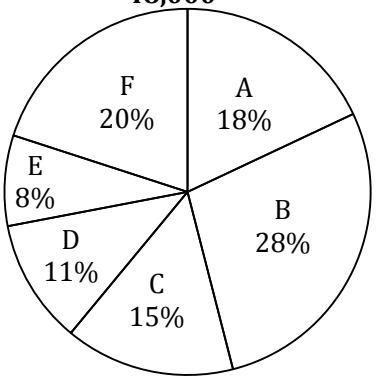
39. Who is the tallest or heaviest among A, B, C, D and E?
(i) E is heavier than D and B. Neither D nor B is the shortest.
(ii) A is taller than B. Neither B nor C is the shortest.
(iii) C is shorter than B but lighter than B.

40. Which of the following persons is B married to amongst A, C, D and E who all belong to the same family?
(i) No one among B, C or E is the oldest member of the family. D is the father of A.
(ii) C is the daughter of D. E is the youngest.
(iii) D has only two children and one of them is a mother. A is unmarried & is brother-in-law of B.

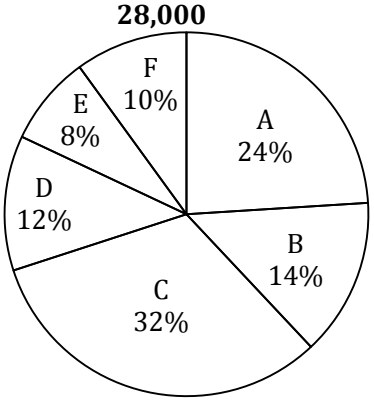
QUANTITATIVE APTITUDE

Directions (41-45): Study the pie-charts carefully and answer the following question.
Distribution of Laptops (HP and Asus) sold by six sellers

Total number of laptops sold = 48,000



Number of Asus laptops sold = 28,000



41. Number of HP Laptops sold by A and B together is approximately what percentage more or less than the number of Asus laptop sold by E and F together?
(a) 145% (b) 227% (c) 127%
(d) 245% (e) 97%

42. Find the difference between the number of Asus laptop sold D and E together to the number of HP laptop sold by A, B and F together?
(a) 10,450 (b) 12,460 (c) 10,540
(d) 12,640 (e) 12,540

43. What is ratio of number of HP laptop sold by D and F together to HP laptop sold by B and E together?
(a) $\frac{139}{109}$ (b) $\frac{109}{139}$ (c) $\frac{113}{127}$
(d) $\frac{127}{113}$ (e) $\frac{121}{147}$

44. Find the total profit earn by seller A if seller A earns Rs. 40 and Rs. 70 per laptop on HP and Asus respectively.
(a) Rs. 5,47,200 (b) Rs. 5,27,500
(c) Rs. 5,47,900 (d) Rs. 4,77,200
(e) Rs. 5,77,200

45. If seller E sells Asus laptop in loss at Rs. 30 each so at what price he should sell each HP laptop to gain Rs. 3,200 in total.
(a) Rs.39 (b) Rs.41 (c) Rs.43
(d) Rs.45 (e) None of these

46. A watch dealer sells watches at Rs. 800 per watch. However, he is forced to give two successive discounts of 10% and 15% respectively. However, he recovers the sales tax on the net sale price from the customer at 25% of the net price. Find the profit percentage if the C.P of watch is Rs.600.
(a) 23.5% (b) 21.5% (c) 25.5%
(d) 27.5% (e) 26.5%

47. The short and the long hands of a clock are 4 cm and 6 cm long respectively. What will be sum of distances travelled by their tips in 4 days? (Take $\pi = 3.14$)
(a) 954.56 cm (b) 3818.24 cm
(c) 2909.12 cm (d) 2703.56 cm
(e) None of these

48. A spherical cannon ball, 28 cm in diameter, is melted and cast into a right circular conical mould the base of which is 35 cm in diameter. Find the height of the cone correct up to two places of decimals.
(a) 8.96 cm (b) 35.84 cm (c) 5.97 cm
(d) 17.92 cm (e) 30.92 cm

49. A train takes 3 seconds to cross a pole and 22 seconds to cross a 855 m long bridge. What is the time taken by the train (in seconds) to cross a 215 m long train coming at a speed of 90 km/hr from the opposite direction?
(a) 5 (b) 8 (c) 12
(d) 7 (e) 15

50. A 10 hectare field is reaped by 2 men, 3 women and 4 children together in 10 days. If working capabilities of a man, a woman and a child are in the ratio 5 : 4 : 2, then a 16 hectare field will be reaped by 6 men, 4 women and 7 children in.
(a) 5 days (b) 6 days (c) 7 days
(d) 8 days (e) None of these

Directions (51-55): In each of the following questions two equations are given. Solve the equations and give answer—
(a) If $x < y$ (b) If $x \leq y$
(c) If x> y (d) If $x \geq y$
(e) $x = y$ or relationship between x and y cannot be established

51. **I.** $35x^2-53x+20 = 0$
II. $56y^2-97y+42=0$

52. **I.** $18x^2 + 18x + 4 = 0$
II. $12y^2 + 29y + 14 = 0$

53. **I.** $8x^2 - 78x + 169 = 0$
II. $20y^2 - 117y + 169 = 0$

54. **I.** $6x^2 + 13x + 5 = 0$
II. $3y^2 + 11y + 10 = 0$

55. **I.** $6x + 7y = 52$
II. $14x + 4y = 35$

Directions (56-60): Study the following table carefully and answer the questions that follow.
The table shows the data related top six schools of India. Some values are missing which you need to find out and answer the questions accordingly.

Schools	Number of teachers	Ratio of male to female teachers	Ratio of teachers to students	Percentage of non-teaching staff
Vasant valley	480	15 : 17	– : –	15%
Woodstock	450	– : –	1 : 6	10%
DPS	—	3 : 2	3 : 20	—
Rishi Valley	510	8 : 7	3 : 10	—
Pathways	—	2 : 7	2 : 5	20%
DAV	—	– : –	2 : 7	15%

Note: Total strength of school = Number of teachers + Number of students + Number of non-teaching staff

56. If female teachers of school Vasant valley are 17% of total strength of school, then what is the ratio of teachers to students in that school ?
(a) 32 : 55 (b) 5 : 11 (c) 32 : 53
(d) 23 : 53 (e) 5 : 13

57. The female students of Pathways school are $15\frac{5}{9}\%$ more than male teachers of school Vasant valley while ratio of male to female students of Pathways school is 14 : 13. Find the number of non-teaching staff of Pathways school.
(a) 180 (b) 192 (c) 210
(d) 189 (e) None of these

58. If strength of all school is same, then find the number of non-teaching staff of school DAV.
(a) 420 (b) 525 (c) 580
(d) 630 (e) None of these

59. If total strength and number of students of schools Woodstock and DPS are same, then teachers of DPS are what percent less than students of Woodstock?
(a) 80% (b) 85% (c) 72%
(d) 92% (e) None of these

60. Find the difference in total strength of school Woodstock and that of Rishi valley.
(a) 980 (b) 840 (c) 780
(d) can't be determined (e) None of these

61. Anil spends 25% of his monthly salary for his household expenditure and 12% on travelling. Out of the remaining, he spends 20% on clothes and saves the rest. If he saves Rs 2520 every month, what is his monthly salary?
(a) Rs 5000 (b) Rs 15000 (c) Rs 3000
(d) Rs 10,00 (e) Rs 8000

62. Raman and Nakul invested in a business. Raman invested Rs 3000 and withdraw Rs 1500 at the end of 8th month. Nakul invested Rs 1000 initially and Rs 3500 more at the end of 4th month but withdraw Rs 1500 at the end of 7th month. At the year's end, they earned Rs 1800. What should be Raman's share?
(a) 800 (b) 920 (c) 864
(d) 850 (e) 795

63. A can do a piece of work in 10 days, B can do the same work in 12 days and C in 15 days. They all started working together, but A leaves the work after 2 days and B leaves the work 3 days before the work is completed. For how many days the work lasted?
(a) 8 days (b) 10 days (c) 7 days
(d) 9 days (e) 6 days

64. A shopkeeper sells shirts at the rate of Rs 400 per shirt and allows a discount of 10% to all customers buying by full cash payment. Also, for all those customers who buy 10 shirts at a time, he counts 12 shirts. If a customer is willing to take both the discounts, what net effective discount can he avail?
(a) 37.5% (b) 12.5% (c) 33.33%
(d) 25% (e) None of these

65. Subbu have a fan whose 5% of the selling price is equal to 6% of its cost price and 7% of the selling price exceeds 8% of its cost price by Rs 1. Find the profit.
(a) Rs 25 (b) Rs 37.5 (c) Rs 50
(d) Rs 75 (e) Rs 62.5

66. A sum of Rs 1000 after 3 years at compound interest becomes a certain amount that is equal to the amount that is the result of a 3 years depreciation from Rs 1728. Find the difference between the rates of CI and depreciation. (Given that CI is 10% p.a.)
(a) $2\frac{1}{3}\%$ (b) $1\frac{2}{3}\%$ (c) 3%
(d) 2% (e) None of these

67. In a co-educational school there are 15 more girls than boys. If the number of girls is increased by 10% and the number of boys is also increased by 16%, there would be 9 more girls than boys. What is the number of students in the school?
(a) 140 (b) 125 (c) 265
(d) 255 (e) 250

68. In Ramnagar colony, the ratio of school going children to non-school going children is 5 : 4. If in the next year, the number of non-school going children is increased by 20% making it 35,400, and the number of school going children remains same. Find the new ratio of school going children to non-school going children?
(a) 4 : 5 (b) 3 : 2 (c) 25 : 24
(d) Data inadequate (e) None of these

69. There was one mess for 30 boarders in a certain hostel. If the number of boarders were increased by 10, the expenses of the mess would increase by Rs 40 per month, while the average expenditure per head diminish by Rs 2. Find the original monthly expenses.
(a) Rs 390 (b) Rs 360 (c) Rs 410
(d) Rs 480 (e) None of these

70. An empty container is filled with pure alcohol the alcohol is slowly to run out and when the container is one-fourth empty, it is replaced with water. Next, when the container is half empty it is again filled with water. Finally, when it is three fourth empty, it is again filled with water. What percentage of container is alcohol now?
(a) $8\frac{1}{2}\%$ (b) $11\frac{3}{4}\%$ (c) $9\frac{3}{8}\%$
(d) $14\frac{3}{8}\%$ (e) None of these

Direction (71 - 75): Each question below is followed by two Statements [I] and [II]. You have to determine whether the data given in the statements are sufficient for answering the question. You should use the data and your knowledge of Mathematics to choose between the possible answers.
Give answer
(a) if the Statement [I] alone is sufficient to answer the question but the Statement [II] alone is not sufficient
(b) if the Statement [II] alone is sufficient to answer the question but the Statement [I] alone is not sufficient
(c) if both Statement [I] and [II] together are needed to answer the question
(d) if either the Statement [I] alone or Statement [II] alone is sufficient to answer the question
(e) if you cannot get the answer from the Statements [I] and [II] together but need even more data

71. In how many days 8 women can complete the work?
[I]. 10 men & 12 Women can finish the work in $1\frac{3}{7}$ days.
[II]. 5 Men and 6 women can finish the work in $2\frac{6}{7}$ days.

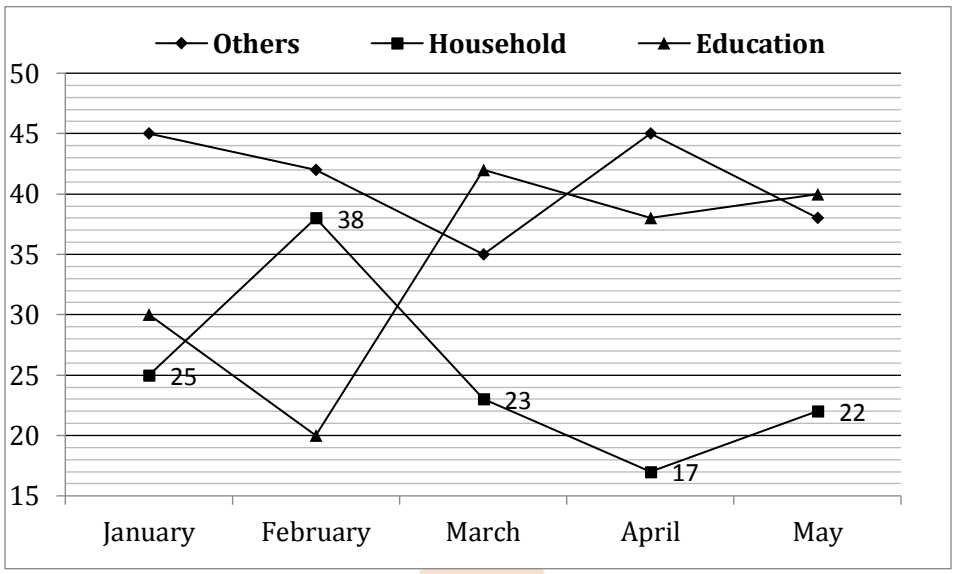
72. What is the radius of the circle?
[I]. Length of a rectangle is 10% more than the breadth. Area of rectangle is 440 cm^2. Length of rectangle equals to circumference of circle.
[II]. Circumference of circle is equal to side of square having area 484 cm^2

73. Ram sold an item. Find the M.P of the item?
[I]. Ram gave two successive discounts is 20% & 5% on marked price. But after that take 25% more on discounted price as tax. Ram can earn 40 more If he sell the item at MP.
[II]. Ram gave two successive discount of MP i.e., 15% & 20% whereas Ram kept M.P. 50% more than the C.P. of that item.

74. Find the amount invested by Jagriti?
[I]. If jagriti invested half of the amount in Yes Bank at 5% for 3years and half the amount in Kotak Bank at 6% for 5 year, she got Rs 4500 as Simple Interest.
[II]. Jagriti will get 2420 more if she will invest in a bank at 10% p.a. for 3 year at compound interest rather than 10% p.a. for 2 year in same bank at compound interest

75. What is the weight of Raju?
[I]. There are four person Raju, Ramesh, Rajan, Rajguru. Average of weight of these four is 51.25. Average weight of Rajan and Rajguru is 47.5. Average weight of Ramesh & Rajguru is 57.5.
[II]. In a class of 50 students having 30 kg as average weight If one students of weight 30 kg is replaced by Rajan then the average increases by 0.4.

Direction (76-80): - Study the following line graph and answer the questions that follow.
The graph shows the percentage distribution of money spent by Avanish on Education, Household and Others in five different months. He spent only 60% of his monthly salary.



Note: Monthly income throughout the year remains constant.
MONTHLY SALARY:- 50,000

76. In June, Avanish spent 25% less amount on others as compared to what he spent on others in May. Find the percentage contribution of money spent on others in June in monthly salary of June.
(a) 20.5% (b) 22.5% (c) 17.1%
(d) 23.2% (e) None of these

77. Avanish invested 10% of the money spent on others in January in a business which gives him 10% interest per annum on amount invested. Find the interest earned by him in one year?
(a) Rs. 125.5 (b) Rs. 152 (c) Rs. 150
(d) Rs. 135 (e) None of these

78. What is the difference in amount saved and amount spent on education by Avanish in April?
(a) Rs. 12100 (b) Rs. 8600 (c) Rs. 7200
(d) Rs. 8500 (e) Rs. 7850

79. Find the total expenditure made in February except education?
(a) Rs. 24,000 (b) Rs. 24,400 (c) Rs. 22,400
(d) Rs. 20,400 (e) None of these

80. Find the ratio of money spent on Education in February to monthly salary in February?
(a) 3 : 22 (b) 4 : 27 (c) 5 : 29
(d) 8 : 35 (e) None of these

ENGLISH LANGUAGE

Directions (81-88): Read the following passage carefully and answer the questions given below it.
One of the major concerns of many European physicians today is the alarming increase in the incidence of suicides across the Continent. Recent studies indicate that more Europeans take their own lives than they die on the highways. While the traditionally high suicide rates in Austria, Hungary, Switzerland and Scandinavia have remained relatively stable, the low rates in Latin and Catholic countries have begun to grow dramatically in the last 20 years. Among some age groups in Ireland, the increase is to the order of 100 percent. In many parts of Europe, suicide has long been common among older people. In parts of Hungary, which holds Europe's record for suicides with a rate of 41 a year per one lakh people, the rate among the elderly is 300. In France it is 114, while the overall rate is 20.8. By comparison the overall suicide rate in the United States is 12.3. In Japan, it is 17.3.
The greatest concern of European specialists is the increasing number of young people who take their own lives. Since 1960s the suicide rate among young French men between the ages of 15 and 29 has tripled. A third of Danish men who die between the ages of 25 and 34 kill themselves.
Experts see the transformation of European society as the key to the recent increases in European suicides. The modernization of the workforce, the increasing social and geographical mobility and the consequent breakdown of

old family structures and support networks all play a role. In a comparative study of suicide in 20 European countries over two decades, it was found that factors such as divorce, unemployment, the number of working women in a society, the number of children and the prevalence of religion, combined with the presence of violent crimes and alcohol abuse, are useful in predicting the rise and fall of suicide rates. As European Southern tier becomes more prosperous, families are becoming smaller, relationship less stable and suicides are increasing. In Eastern Europe, where change is coming even faster, suicide rates are expected to flare up for a rather long period of time.

As traditional family support systems have weakened in the U. S., Canada and Britain, State and community services have worked to fill the gap with counseling and hotlines. But there has been a setback to this very recently. More and more people are beginning to consider the way they die as an equally personal choice. This has been fuelled by a whole new range of "how-to-do-it" books hitting the market, a few of them even topping the best-seller list. The authors usually justify their works as human aids for the aged and infirm. Suicide is portrayed essentially as self-inflicted euthanasia, itself a hotly debated issue. As a consequence of this, an increasing number of people in Europe are now directly confronting their own mortality.

81. What, according to the passage, has exactly been the greatest concern of European specialists?
(a) Increase in the number of young people committing suicide
(b) Increase in the number of Danish men killing themselves
(c) Increase in the number of older people committing suicide
(d) Increase in the number of French people killing themselves
(e) None of these

82. Which of the following has not been mentioned in the passage as a reason for the gradual escalation in European suicide rate?
(a) The breakdown of traditional family structures
(b) The migration of people from one place to another
(c) The growing unemployment problem
(d) The mobility of people on the social scale
(e) None of these

83. According to the passage, the finding of the comparative study of suicide in 20 countries was that
(a) divorce and unemployment led to violent crimes and alcoholic abuse.
(b) suicide rate could be predicted on the basis of certain socio-cultural factors.
(c) violent crimes and alcohol abuse are the main reasons for suicides.
(d) the prevalence of religion was combined with the presence of violent crimes and alcohol abuse.
(e) suicide rates may rise or fall and are difficult to predict.

84. What has been mentioned in the passage as regards the suicide rate in Switzerland?
(a) The increase in the suicide rate in Switzerland has been higher than that of other European countries.
(b) There has not been any appreciable change in the suicide rate in Switzerland over the few years.
(c) Switzerland's suicide rate has been the same as that of other countries like Austria, Hungary and Scandinavia.
(d) There has been a steady increase in the suicide rate in Switzerland over the past 20 years.
(e) Switzerland's suicide rate has been traditionally stable, but has been growing over the last 20 years.

85. Which of the following statements is **TRUE** in the context of the passage?
(a) Some places in Hungary have a yearly suicide rate of 300 elderly people per one lakh people.
(b) The overall suicide rate in Ireland has increased by 700 percent in the last 20 years.
(c) The suicide rate in Latin and Catholic countries has remained low over the last 20 years.
(d) In France, 114 individuals per one lakh people commit suicide every year.
(e) In Japan, the suicide rate of elderly people is 17.3 a year per one lakh people.

86. The activities of State and community services are yielding less results in recent times on account of the
(a) growing resistance to counselling and hotlines by the people
(b) increase in the number of the aged and the terminally ill resorting to euthanasia
(c) weakening of traditional family support systems
(d) ever-increasing number of people committee suicide out of frustration
(e) increase in the number of people exerting their personal choice in deciding the way they die

87. Which of the following statements is **NOT TRUE** in the context of the passage?
(a) Lesser number of Europeans are today dying of highway accidents than killing themselves.
(b) One-third of men between the ages of 25 and 34 who kill themselves are Danish.
(c) The overall suicide rate in America is 12.3 a year per one lakh people.
(d) An overall suicide rate of 41 a year per one lakh people has been found in parts of Hungary.
(e) During the 1960s the suicide rate of 15-29 year old French men was only one-third of what it is today.

88. What has been mentioned in the passage regarding Europe's Southern part?
(a) Suicide rates are remaining stable there.
(b) Unemployment is comparatively more there.
(c) The living standards of the people are improving there.
(d) There are smaller families there.
(e) Economic transformation is relatively faster there.

Directions (89-95): Read the following passage carefully and answer the questions given below it.
From 'apparel to aerospace', 'steel to software', the pace of technological innovation is quickening. No longer can companies afford to miss **generation** of technology and expect to remain competitive. Adding to the pressure, innovations are increasingly crossing industry boundaries; a new fiber developed by the textile industry has potential for building materials and medical equipment. Some companies are adept at using a diversity of technologies to create new products that transform markets. But many others are floundering because they rely on a technology strategy that no longer works in such a fast changing environment. The difference between success and failure is not how much a company spends on research and development (R&D), but how it approaches it.
There are two possible approaches. Either a company can invest in R&D that replaces an older generation of technology the 'break through' approach-or its focus on combining existing technologies into hybrid technologies – the 'technologies fusion' approach. It blends incremental technical improvements from several previously separate field of technology to create products that revolutionise markets.
In a world where the old maxim 'one technology one industry' no longer applies, a singular breakthrough strategy is inadequate; companies need to include both the breakthrough and fusion approaches in their technology strategy. Relying on breakthroughs alone fails because it focuses the R&D efforts to narrowly, ignoring the possibilities of combining technologies. Yet many western companies still rely almost exclusively – on the breakthrough approach. The reasons are complex: a distrust of outside innovations and not-invented here engineering and arrogance and aversion to sharing research results.

89. Which of the following is **false** according to the passage?
(a) Technological innovation is taking place at a fast pace
(b) All technological innovations have applicability in other industries
(c) Companies failing to adopt new technology may fail.
(d) Companies which adopt technologies of other industries have an advantage
(e) Technology becomes obsolete in a fast changing environment.

90. Which of the following would correctly reflect the position regarding the two approaches to technology adoption?
(a) Both the approaches are to be used at the same time
(b) 'Breakthrough' approach is only to be used
(c) 'Technology fusion' approach is only to be used
(d) 'Breakthrough approach' is preferable for many companies
(e) None of these

91. Which of the following has the same meaning as the word '**generation'** as it has been used in-the passage?
(a) Family (b) Class (c) Offspring
(d) Phase (e) Level

92. Which of the following features of technology has been highlighted most prominently by the author of the passage?
(a) Its improper utilization by some companies
(b) The speed at which innovations are happening
(c) The expenses involved in developing technology
(d) The two approaches to adopting technology
(e) None of these

93. What does the author want to highlight by using the example '**apparel to aerospace'** and '**steel to software'**?
(a) Many industries are trying to improve technology
(b) His knowledge about the various industries
(c) The wide spread of technological innovations
(d) The speed of the technological innovation
(e) None of these

94. What, according to the author, is adding to the pressure on the companies?
(a) Applicability of technologies of other industries to them
(b) Increasing speed of technological innovations
(c) Work load on their R & D departments
(d) Finding funds for increased R & D activities
(e) Demand from customers for improved products

95. What is the immediate effect, according to the passage, if a company does not innovate?
(a) It closes down.
(b) It ceases to be competitive in the market.
(c) The prices of its products go up.
(d) Its R & D departments close down.
(e) It adds pressure on itself.

Directions (96-100): Pick out the word opposite or nearly so in the meaning of the given words.

96. EXTRAVAGANT
(a) Developing (b) Wonderful
(c) Disappearing (d) Economical
(e) Real

97. VIVID
(a) Peculiar (b) Uncanny (c) Evocative
(d) Stifle (e) Ceases

98. DESULTORY
(a) Isolated (b) Manifest (c) Pertinent
(d) Customization (e) Frequent

99. ERUDITE
(a) Aversion (b) Sleazy (c) Sagacious
(d) Loquacious (e) Disheveled

100. DEBONAIR
(a)Awkward (b) Windy (c) Balmy
(d) Sportive (e) Stormy

Directions (101-103): In each of the questions given below a sentence is given with a blank which is followed by five options that provide us with the possible alternatives for the blank. The blank must be filled by one of the idioms or phrases given in the options.

101. We missed our flight to Paris because the connecting flight was late and to _____ they made us pay for a new ticket as if it was our fault!
(a) break a leg (b) hit the books
(c) add insult to injury (d) cut the corners
(e) scratch someone's back

102. I can't believe that was our test. I think it was easier than some of our homework! It was a _____.
(a) whole new ball game (b) new lease of life
(c) dime's worth (d) bit of fluff
(e) piece of cake

103. His birthday was supposed to be a surprise! I can't believe you _____. Now he knows!
(a) let the cat out of bag
(b) keep your cool
(c) keep a straight face
(d) fate worse than death
(e) face like thunder

Directions (104-105): In the question given below few sentences are given which are grammatically correct and meaningful. Connect them by the word given above the statements in the best possible way without changing the intended meaning. Choose your answer accordingly from the options to form a correct, coherent sentence.

104. BECAUSE
(A) The federal department has twice rejected LePage's requests for centralization
(B) LePage has been in a tug of war with the regional boards for control of the federal money for several years.
(C) Lepage didn't work in collaboration with federal department as required.
(D) The organization claims that LePage has broken federal law by refusing to release the funds within 30 days of them having become available in August.
(a) Only B-D (b) Only D-A
(c) Both C-B and D-A (d) Only A-C
(e) None of these

105. BY THE TIME
(A) The storm crawls up the East Coast Wednesday and Thursday.
(B) It's expected to gust with strong 30 to 50 mph winds.
(C) That's a signal that the storm is going to get more intense, quickly.
(D) Once the storm reaches New England, it may bring dangerous, power line-snapping blizzard conditions and coastal flooding.
(a)Only A-B (b)Only B-C (c)Only D-C
(d)Only D-B (e)Only C-A

Directions (106-108): Five statements are given below, labelled a, b, c, d and e. Among these, four statements are in logical order and form a coherent paragraph. From the given options, choose the option that does not fit into the theme of the paragraph.

106. (a) Digital radio works by turning sound into digital signals for transmission and then decoding them at the other end using digital radio receivers;
(b) The result is close-to-CD-quality sound output.
(c) Digital radio is to normal radio what digital television is to your standard analog TV.
(d) It's the most significant upgrade to happen since the introduction of FM in Australia in the 1970s and the leap in quality is comparable to FM versus AM.
(e) Although DAB has the potential to provide better sound quality than FM, governments may end up filling the DAB bandwidth with as many channels as possible which may divide the bit-rate (the rate of data transfer) among these broadcasts. As a result, if the DAB bandwidth is choked, it may suffer a drop in quality.

107. (a) India has developed complex election expenditure, political party funding, and reporting and disclosure laws.
(b) Competitive political parties and election campaigns are central to the health of democracies.
(c) Parties and campaigns require significant resources to be effective.
(d) Current state funding measures include provision of free time on public broadcasters for national parties in general elections and for registered state parties in state legislature elections.
(e) However, these laws may have perverse impacts on the electoral system: they tend to drive campaign expenditure underground and foster a reliance on unaccounted funds or "black money."

108. (a) Many analysts feel that these are opening gambits to create uncertainty as bargaining ploy with the adversary.
(b) Minor incidents had been taking place since long.
(c) When man-made disaster looms, sane voices come together to ward it off.
(d) However, with the coming of Mr. Donald Trump to the White House matters have taken a more serious turn, to the extent that things could get out of hand and even lead to war should the two powers not negotiate and come to a solution acceptable to both sides.
(e) Such a disaster is clearly looming in the South China Sea, brought on by the two leading powers of the world, China and the USA; the former by militarising the islands, the latter by objecting to it.

Directions (109-110): In each of the following questions, various sentences are given and you have
to choose the one which has some or any grammatical error in it. In the questions where option (e) all are correct is given and all the sentences are grammatically correct choose option (e) as the correct choice.

109. (a) The potassium found in potatoes is said to reduce cholesterol level, blood pressure and controls heart problems.
(b) The calcium and magnesium content in potatoes can help ease rheumatism.
(c) Health experts and nutritionists say that turnip juice has more Vitamin C than orange juice.
(d) To watch even a single plant grow from seedling to small and big with more leaves each day and find them flowering and giving fruits can give you happiness untold.
(e) All are correct.

110. (a) Everyone who desires to participate in the good to be obtained must share in the act.
(b) As we have seen above, all must participate that none may be in a position to reproach the rest.
(c) While Dean had no desire to participate in the new and perilous sport of ice climbing, he didn't share Cynthia total perplexity at why a sane human being would even consider subjecting himself or herself to such uncomfortable danger.
(d) They were dressed like the others, and seemed to participate in the general joy.
(e) He being the best student in the class, Gopal was chosen to participate in the competition.

Directions (111-115): In the following passage there are blanks, each of which has been numbered. These numbers are printed below the passage and against each, five words are suggested, one of which fits the blank appropriately. Find out the appropriate word that fits the blank.

In these days of economic liberalization, globalization, etc. materialistic values have assumed **(111)** importance. Money, physical comforts and luxuries are the most sought after aspects. There has been **(112)** competition. Such competition **(113)** stress. The stress leads to **(114)** of health of the people. Indian culture has **(115)** its striking uniqueness, as against the Western culture.

111. (a) usual (b) little (c) tangible (d) least (e) greater

112. (a) critical (b) unhealthy (c) unequalled (d) no (e) absolute

113. (a) releases (b) deserves (c) generates (d) demonstrates (e) suppresses

114. (a) neglect (b) illness (c) generation (d) deterioration (e) encroachment

115. (a) maintained (b) illustrated (c) marginalised (d) bestowed (e) forsaken

Direction (116-120): In the following passage there are blanks, each of which has been numbered and one word has been suggested alongside the blank. These numbers are printed below the passage and against each, five options are given. Find out the appropriate word which fits the blank appropriately. If the word written alongside the blank fits the passage, choose option 'e' (No correction required) as the correct choice.
Significantly, in **remarking (116)** who a whistle-blower is, the law goes beyond government officials who **boost (117)** corruption they come across in the course of their work. It includes any other person or non-governmental organisation. The importance of such **radical (118)** expansion is underlined by the fact that in the last few years, more than 65 people have been killed for exposing corruption in the government on the basis of **instruction (119)** they obtained under the Right to Information (RTI) Act. The RTI law has **guaranteed (120)** the common man to have access to information from public authorities — which only government officials were earlier privy to — making every citizen a potential whistle-blower.

116. (a)characterize (b)assigning (c)defining (d)illustrating (e)No correction required

117. (a)unfolds (b)proves (c)inform (d)expose (e)No correction required

118. (a)progressive (b)intermittent (c)shifting (d)mobile (e)No correction required

119. (a)advice (b)information (c)knowledge (d)experience (e)No correction required

120. (a)revoked (b)licensed (c)enabled((d)empowered (e)No correction required

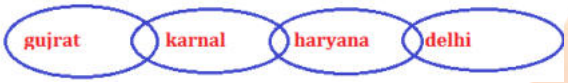
Solutions

REASONING ABILITY

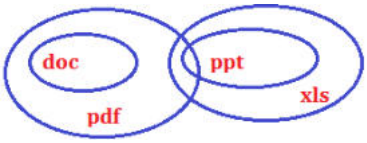
Direction (1-5);

Mobile Phone	Storage Space
F	1gb
B	500mb
D	8gb
E	32gb
C	2gb
G	256mb
A	16gb

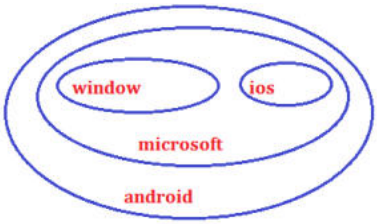
1. (b); 2. (c); 3. (a);
4. (c); 5. (e);
6. (c);



7. (d);



8. (c);



Direction (9-13):

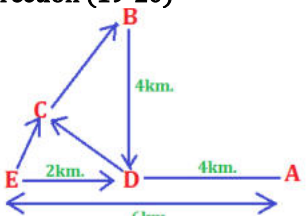
Person	Mall	Colour
W	GIP	Violet
X	DLF	Green
Y	SRS	Blue
Z	GIP	Red
M	DLF	Purple
N	GIP	Black
O	SRS	White

9. (b); 10. (c); 11. (d);
12. (c); 13. (c);

Direction (14-18)

14. (b); 146
15. (d); Lowest number is 594.
Second digit is **9**
16. (c); 4
17. (c); 3
18. (a); 13

Direction (19-20)



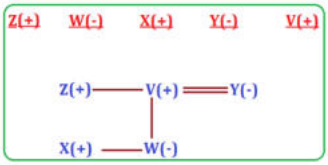
19. (b); 20. (a); 21. (e);
22. (d); 23. (a); 24. (c);
25. (d);

Directions (26-30):

Movie	Hall	Rating	Time
Go Goa	Golden/Platinum	1 star	9a.m
Chandni-Chowk to China	Golden/Platinum	4 star	6p.m
London Dreams	Deluxe	5 star	9p.m
Chennai Express	Galaxy	3 star	12noon
Mumbai Metro	Diamond	2 star	3p.m

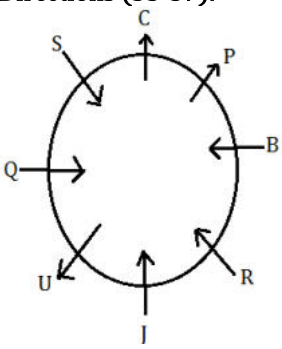
26. (a); 27. (b); 28. (d);
29. (e); 30. (b);

Direction (31-32)



31. (c);
32. (a);

Directions (33-37):

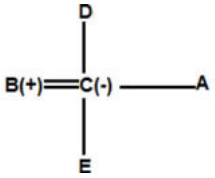


33. (c); **34.** (b); **35.** (a);
36. (a); **37.** (d);

38. (d); None is sufficient as the person can be drunk or not have driving license but still be driving the vehicle.

39. (b); From (i) and (iii) we can say that A is the heaviest.

40. (e); From all the statements taken together, we can determine B is married to C.



QUANTITATIVE APTITUDE

41. (c); HP laptop sold by A
$= \frac{18}{100} \times 48{,}000 - \frac{24}{100} \times 28000$
$= 8640 - 6720$
$= 1920$
HP laptop sold by B
$= \frac{28}{100} \times 48000 - \frac{14}{100} \times 28{,}000$
$= 13{,}440 - 3{,}920$
$= 9{,}520$
HP laptop sold by A and B together $= 11{,}440$
Asus laptop sold by E and F together
$= \frac{18}{100} \times 28{,}000$
$= 5040$
Required percentage $= \frac{11{,}440 - 5040}{5040} \times 100$
$= \frac{6400}{5040} \times 100 \cong 127\%$

42. (d); Asus laptop sold by D and E together
$= \frac{20}{100} \times 28{,}000$
$= 5600$
HP laptop sold by A and B $= 11{,}440$
HP laptop sold by F
$= \frac{20}{100} \times 48{,}000 - \frac{10}{100} \times 28{,}000$
$= 9600 - 2800 \Rightarrow = 6800$
Desired difference $= 11{,}440 + 6{,}800 - 5{,}600$
$= 12{,}640$

43. (b); HP laptop sold D and F together
$= \frac{(20+11)}{100} \times 48{,}000 - \frac{(12+10)}{100} \times 28{,}000$
$= 14{,}880 - 6{,}160$
$= 8{,}720$
HP laptop sold by B and E together
$= \frac{(28+8)}{100} \times 48{,}000 - \frac{(14+8)}{100} \times 28{,}000$
$= 17{,}280 - 6{,}160$
$= 11{,}120$
Desired Ratio $= \frac{8{,}720}{11{,}120} = \frac{109}{139}$

44. (a); Asus laptop sold by A
$= \frac{24}{100} \times (28{,}000)$
$= 6{,}720$
HP laptop sold by A
$= \frac{18}{100}(8{,}000) - \frac{24}{100}(28{,}000)$
$= 1{,}920$
Total profit of A $= 40 \times 1{,}920 + 70 \times 6{,}720$
$= 76{,}800 + 4{,}70{,}400$
$=$ Rs. 5,47,200

45. (e); Number of Asus laptop sold by E
$= \frac{8}{100} \times 28{,}000$
$= 2240$
Total loss $= 2{,}240 \times 30 = 67{,}200$
Total S.P. of HP laptop $= 67{,}200 + 3{,}200 = 70{,}400$
Total no. of HP laptop
$= \frac{8}{100} \times 48{,}000 - \frac{8}{100} \times 28{,}000$
$= 3{,}840 - 2240$
$= 1600$
Profit should be gain on HP laptop
$= \frac{70{,}400}{1{,}600} \Rightarrow =$ Rs. 44 each

46. (d); S. P. after discount $= 800 \times \frac{90}{100} \times \frac{85}{100} = 612$
Net sale price $= 612 \times \frac{125}{100} =$ Rs. 765
Profit Percentage $= \frac{765-600}{600} \times 100 = \frac{165}{6}\%$
$= 27.5\%$

47. (b); In 4 days, the short hand covers its circumference $4 \times 2 = 8$ times long hand covers its circumference $4 \times 24 = 96$ times
Then they will cover a total distance of :–
$(2 \times \pi \times 4)\ 8 + (2 \times \pi \times 6)\ 96 \Rightarrow 3818.24$ cm

48. (b); The volume in both the cases will be equal. Let the height of cone be = h
$4 \times \frac{22}{7} \times (14)^3 \times \frac{1}{3} = \frac{22}{7} \times \left(\frac{35}{2}\right)^2 \times \frac{h}{3}$
$\Rightarrow 4(14)^3 = h\left(\frac{35}{2}\right)^2$
$\Rightarrow h = \frac{4 \times 14 \times 14 \times 14 \times 2 \times 2}{35 \times 35}$
$\Rightarrow h = 35.84$ cm

49. (a); Let L and V_t be the length and speed of train respectively.
Then, $\frac{L}{V_t} = 3$
and $\frac{L+855}{V_t} = 22$
$\Rightarrow \frac{L}{V_t} + \frac{855}{V_t} = 22$
$3 + \frac{855}{V_t} = 22$
$\Rightarrow V_t = \frac{855}{19} = 45$ m/s
$L = 3 \times 45 = 135$ m
Speed of the second train = 90 km/hr = 25 m/s
∴ Time taken to cross 215 m long train
$= \frac{135+215}{45+25} = 5$ seconds.

50. (d); Ratio of their efficiency = 5 : 4 : 2
One day work of 2 men = 10 units
One day work of 3 women 12 units
One day work of 4 children 8 units
Let time taken is D
$= \frac{(10+12+8)\times 10}{10} = \frac{[(6\times5)+(4\times4)+(7\times2)]\times D}{16}$
$30 = \frac{60\times D}{16}$
D = 8 days

51. (a); $35x^2 - 25x - 28x + 20 = 0$
$5x(7x - 5) - 4(7x - 5) = 0$
$x = \frac{4}{5}, \frac{5}{7}$
$56y^2 - 49y - 48y + 42 = 0$
$7y(8y - 7) - 6(8y - 7) = 0$
$y = \frac{6}{7}, \frac{7}{8}$
$x < y$

52. (d); I. $18x^2 + 18x + 4 = 0$
$\Rightarrow 3x(3x + 2) + 1(3x + 2) = 0$
$\Rightarrow (3x + 1)(3x + 2) = 0$
$\therefore x = -\frac{1}{3}$ or $-\frac{2}{3}$
II. $12y^2 + 29y + 14 = 0$
$\Rightarrow 3y(4y + 7) + 2(4y + 7) = 0$
$\Rightarrow (3y + 2)(4y + 7) = 0$
$\therefore y = -\frac{2}{3}$ or $-\frac{7}{4}$
$x \geq y$

53. (d); I. $8x^2 - 78x + 169 = 0$
$\Rightarrow (2x - 13)(4x - 13) = 0$
$\therefore x = \frac{13}{2}$ or $\frac{13}{4}$
II. $20y^2 - 117y + 169 = 0$
$\Rightarrow (4y - 13)(5y - 13) = 0$
$\therefore y = \frac{13}{4}$ or $\frac{13}{5}$
$\therefore x \geq y$

54. (d); I. $6x^2 + 13x + 5 = 0$
$6x^2 + 3x + 10x + 5 = 0$
$3x(2x + 1) + 5(2x + 1) = 0$
$x = -\frac{5}{3}, -\frac{1}{2}$
II. $3y^2 + 11y + 10 = 0$
$3y^2 + 11y + 10 = 0$
$3y^2 + 6y + 5y + 10 = 0$
$3y(y + 2) + 5(y + 2) = 0$
$y = -2, -\frac{5}{3}$
$x \geq y$

55. (a); Equation (I) × 4 and equation (II) × 7

$$\begin{array}{rcl} 24x+28y & = & 208 \\ \underline{-98x\pm28y} & = & \underline{-245} \\ -74x & = & -37 \end{array}$$

$x = \frac{1}{2}$
$y = 7$
$\therefore y > x$

56. (c); Number of female teachers
$= \frac{17}{32} \times 480 = 255$
∴ Total strength of school
$= \frac{100}{17} \times 255 = 1500$
Number of students
$= 1500 - 480 - \frac{15}{100} \times 1500$
$= 795$
∴ Required ratio $= \frac{480}{795} = \frac{32}{53}$

57. (d); Number of female students of Pathways
$= \frac{1040}{900} \times 225$
$= 260$
Number of male students
$= 260 \times \frac{14}{13}$
$= 280$
Number of teachers
$= (260 + 280) \times \frac{2}{5} = 540 \times \frac{2}{5} = 216$
Required number of non-teaching staff
$= (540 + 216) \times \frac{20}{80} = 756 \times \frac{20}{80} = 189$

58. (b); Since strength of all schools is same.
Students in Woodstock = 450 × 6 = 2700
∴ 90% of strength = 2700 + 450
∴ total strength of Woodstock = $3150 \times \frac{100}{90}$
$= 3500$
So, required number of non-teaching staff
= 15% of 3500
= 525

59. (b); Total strength = 3500
Teachers in DPS $= 2700 \times \frac{3}{20} = 405$
∴ Required percentage $= \frac{2700 - 405}{2700} \times 100$
$= 85\%$

60. (d); We can't find the strength of school Rishi Valley with given data.

61. (a); Let Anil's Salary be Rs x
According to the question,
25% of x $= \frac{x}{4}$; on household expenditure
12% of x $= \frac{3x}{25}$; on travelling
20% of $\left(x - \frac{x}{4} - \frac{3x}{25}\right) = \frac{63x}{500}$, on clothes
Therefore, remaining salary
$= 80\%$ of $\left(x - \frac{x}{4} - \frac{3x}{25}\right) = 2520$
$\Rightarrow x =$ Rs 5000

62. (c); Raman's investment = first 8 months + last 4 months
$= 3000 \times 8 + 1500 \times 4$
$= 30{,}000$
Nakul's investment = first 4 months + next 3 months + remaining five months
$= 1000 \times 4 + 4500 \times 3 + 3000 \times 5$
$= 32{,}500$
$Therefore, \frac{Raman}{Nakul} = \frac{30000}{32500} = \frac{12}{13}$
Raman's share in profit
$= \frac{12}{(12+13)} \times 1800 = Rs\ 864$

63. (c); From the question,
A, B and C work together for 2 days.
C works alone for 3 days.
B and C finish the remaining work together.
A, B and C finish the work in 2 days
$= 2\left(\frac{1}{10} + \frac{1}{12} + \frac{1}{15}\right) = \frac{1}{2} of\ work$
C finishes in 3 days
$= 3\left(\frac{1}{15}\right) = \frac{1}{5} of\ work$
Total work remaining $= 1 - \frac{1}{2} - \frac{1}{5} = \frac{3}{10}$
$\frac{3}{10} of\ work\ is\ done\ by\ B\ and\ C\ in\ 2\ days$
Total days to finish the work
$= 2 + 3 + 2 = 7\ days$

64. (d); Price of 12 shirts $= 400 \times 12 =$ Rs 4800
Price of 10 shirts $= 400 \times 10 =$ Rs 4000
Cash discount on 10 shirts = 10% of 4000
= Rs 400
∴ Total amount to be paid for 12 shirts
= 4000 – 400 = Rs 3600
Net discount availed
$= \frac{1200}{4800} \times 100\% = 25\%$

65. (c); According to the question,
5% of S.P. = 6% of C.P. i.e., 5 S.P. – 6 C.P. = 0 ...(i)
7% of S.P. – 8% of C.P. = 1, i.e., 7 S.P. – 8 C.P. = 100 ....(ii)
Solving both the equations, we get
C.P. = 250, S.P. = 300, hence the profit = Rs 50

66. (b); $Amount\ after\ 3\ years = 1000\left(1 + \frac{10}{100}\right)^3$
$= Rs.\ 1{,}331$
According to question,
$1331 = 1728\left(1 - \frac{x}{100}\right)^3$
$\Rightarrow \frac{11}{12} = 1 - \frac{x}{100}$
$\Rightarrow x = \frac{25}{3}\%$
$\therefore Required\ difference = 10 - \frac{25}{3} = \frac{5}{3}\%$
$= 1\frac{2}{3}\%$

67. (c); Let total numbers of boys = x
Then, total number of girls = x + 15
Now,
$\left[(x+15) \times \frac{110}{100}\right] - \left[x \times \frac{116}{100}\right] = 9$
$\Rightarrow \frac{110x+1650-116x}{100} = 9$
$\Rightarrow 6x = 750$
$\Rightarrow x = 125$
∴ Total Students in School = 125 + 125 + 15
= 265

68. (c); Let, total number of school going children
= 50x
And total number of Non-School going children = 40x
∴ New Ratio $= \frac{x}{y} = \frac{50}{40 \times \frac{120}{100}}$
$= \frac{50}{48} = 25:24$

69. (b); Initial expenses = x
New expenses = x + 40
According to Question,
$\Rightarrow \frac{x}{30} = \frac{x+40}{40} + 2$
$\Rightarrow \frac{x}{30} = \frac{x+40+80}{40}$
∴ x = 360

70. (c); Portion of container filled with alcohol at end
$= \left(1 - \frac{1}{4}\right)\left(1 - \frac{1}{2}\right)\left(1 - \frac{3}{4}\right)$
$= \frac{3}{32}$
$\therefore \frac{3}{32} \times 100 =$
$9\frac{3}{8}\%\ of\ container\ is\ filled\ with\ alcohol\ at\ end$

71. (e); From statement [I]
10M + 12W takes $\frac{10}{7}$ days to complete the work
From statement [II]
5M + 6W can complete the work in $\frac{20}{7}$ days
Both the equations is same so, we can't solve the question by using both [I] and [II]
∴ Hence, Neither statement [I] nor statement [II]is sufficient to answer the question.

72. (d); From statement [I]
L = 1.1 B
LB = 440 ⇒ 1.1B.B = 440

$\Rightarrow B^2 = 400$
$\Rightarrow B = 20$ cm
$\Rightarrow L = 22$ cm
$L = 2\pi r$
$22 = 2 \times \frac{22}{7} \times r \Rightarrow r = 3.5\ cm$
From statement [II]
Area of square, $a^2 = 484$
$A = 22$
According to question
$2\pi r = 22$
$2 \times \frac{22}{7} \times r = 22$
$r = 3.5\ cm$
∴ Hence, Either statement [I] alone or statement [II] alone is sufficient to answer the question.

73. (a); From Statement [I]
MP = x
After two successive discounts $= \frac{80}{100} \times \frac{95}{100} \times x$
$= 0.76x$
Final S.P after taking tax $= \frac{125}{100} \times 0.76x$
$= 0.95x$
According to question
MP – SP = 40
$x - 0.95x = 40$
$0.05x = 40$
x= 800

From statement [II]
Let, MP = x
$S.P = \frac{85}{100} \times \frac{80}{100} \times x$
$= 0.68x$
As, any value is not given so we can't find out the M.P.
∴ Hence, Statement [I] alone is sufficient to answer the question but the Statement [II] alone is not sufficient

74. (d); From statement [I]
Let total amount =x
$\frac{x}{2} \times \frac{5 \times 3}{100} + \frac{x}{2} \times \frac{6 \times 5}{100} = 4500$
$\frac{x}{2}\left[\frac{15}{100} + \frac{30}{100}\right] = 4500$
$x = 20{,}000$
From statement [II]
$2420 = x\left[1 + \frac{10}{100}\right]^3 - x\left[1 + \frac{10}{100}\right]^2$
$2420 = x \times 1.1^3 - x \times 1.1^2$
$2420 = 1.331x - 1.21x$
$0.121x = 2420$
$x = 20{,}000$
∴ Hence, Either statement [I]alone or statement [II] alone is sufficient to answer the question.

75. (c); From statement [I]
Raju + Ramesh + Rajan + Rajguru = 51.25×4
= 205 ....(i)
Rajan + Rajguru = 47.5 ×2 = 95 ...(ii)
Ramesh + Rajguru = 57.5 ×2 = 115 ..(iii)
From statement [II]
Let Rajan weight = x
Weight of 50 students = 30 × 50
= 1500 kg
Weight after one students replaced by Rajan
= 1500 – 30 + x
30.4 × 50 = 1470 + x
1520 – 1470 = x
x = 50
Rajan Weight = 50 kg
From Statement [I] and [II]
$Rajan\ weight = 50\ kg$
$Rajguru\ weight = 95 - 50 = 45kg$
$Ramesh\ weight = 115 - 45 = 70\ kg$
$Raju\ weight = 205 - 50 - 45 - 70 = 40\ kg$
∴ Hence, Both Statement I and II together are needed to
answer the question

Direction (76-80); Money spent $= \frac{60}{100} \times 50000 = 30{,}000$

76. (c); Money spent by Avanish on others in June
$= \frac{75}{100} \times \frac{38}{100} \times 30000$
$= 8550$
∴ % contribution $= \frac{8550}{50000} \times 100 = 17.1\%$

77. (d); Money invested by Avanish $= \frac{10}{100} \times \frac{45}{100} \times 30{,}000$
= Rs. 1350
∴ Interest earned by him $= \frac{10}{100} \times 1350$
= Rs. 135

78. (b); Amount saved in April $= \frac{40}{100} \times 50000$
$= Rs.\ 20{,}000$
Amount spent on education $= \frac{38}{100} \times 30{,}000$
= Rs. 11,400
∴ Required difference = Rs. 8600

79. (a); Asked expenditure in February except education
$= \frac{(100-20)}{100} \times 30000 =$ Rs. 24,000

80. (e); Required ratio $= \frac{\frac{20}{100} \times 30{,}000}{50{,}000} = \frac{3}{25}$

ENGLISH LANGUAGE

81. (a); Refer the first sentence of the second paragraph, "The greatest concern of European specialists is the increasing number of young people who take their own lives."

82. (e); Refer the first two sentences of the third paragraph, "Experts see the transformation of European society as the key to the recent increases in European suicides. The modernization of the workforce, the increasing social and geographical mobility and the consequent breakdown of old family structures and support networks all play a role."

83. (b); Refer the third sentence of the third paragraph, "In a comparative study of suicide in 20 European countries over two decades, it was found that factors such as divorce, unemployment, the number of working women in a society, the number of children and the prevalence of religion, combined with the presence of violent crimes and alcohol abuse, are useful in predicting the rise and fall of suicide rates."

84. (b); Refer the third sentence of the first paragraph, "While the traditionally high suicide rates in Austria, Hungary, Switzerland and Scandinavia have remained relatively stable, the low rates in Latin and Catholic countries have begun to grow dramatically in the last 20 years."

85. (a); Refer the third last sentence of the first paragraph, "In parts of Hungary, which holds Europe's record for suicides with a rate of 41 a year per one lakh people, the rate among the elderly is 300."

86. (e); Refer the third sentence of the last paragraph, "More and more people are beginning to consider the way they die as an equally personal choice."

87. (b); According to the last sentence of the second paragraph, one- third of the Danish people, who die, kill themselves.

88. (d); Refer the second last sentence of the third paragraph, "As European Southern tier becomes more prosperous, families are becoming smaller, relationship less stable and suicides are increasing."

89. (b); Sentence (b) is not true in the context of the passage.

90. (a); Refer the first sentence of the last paragraph "In a world where the old maxim 'one technology one industry' no longer applies, a singular breakthrough strategy is inadequate; companies need to include both the breakthrough and fusion approaches in their technology strategy."

91. (d); Here 'Phase' is going correctly and similar with the word 'generation' in the context of the passage.

92. (d); The author has highlighted the two approaches that have been described in the entire passage.

93. (c); The author wanted to highlight the widespread of technological innovations, as indicated in the first sentence of the passage, "From 'apparel to aerospace', 'steel to software', the pace of technological innovation is quickening."

94. (a); Refer the third sentence of the first paragraph "Adding to the pressure, innovations are increasingly crossing industry boundaries; a new fiber developed by the textile industry has potential for building materials and medical equipment."

95. (b); Refer the second sentence of the first paragraph "No longer can companies afford to miss generation of technology and expect to remain competitive."

96. (d); Economical and extravagant are opposite in meaning.
Extravagant means lacking restraint in spending money or using resources.

97. (c); Vivid and evocative are similar in meaning.
Vivid means producing powerful feelings or strong, clear images in the mind.
Evocative means bringing strong images, memories, or feelings to mind.

98. (c); Desultory and pertinent are opposite in meaning.
Desultory means lacking a plan, purpose, or enthusiasm.
Pertinent means relevant or applicable to a particular matter; apposite.

99. (c); Erudite and sagacious are similar in meaning.
Erudite means having or showing great knowledge or learning.
Sagacious means having or showing keen mental discernment and good judgement; wise or shrewd.

100. (a); Awkward is an antonym of Debonair.
Debonair means (of a man) confident, stylish, and charming.

101. (c); "To add insult to injury" is the right choice which means 'to make a situation worse'.

102. (e); 'A piece of cake' is the right choice which means something is very easy.

103. (a); 'Let the cat out of bag' is the correct choice which means to accidentally reveal a secret.

104. (d); The conjunction 'BECAUSE' is used to introduce a word or phrase that stands for a clause expressing an explanation or reason.
"The federal department has twice rejected LePage's requests for centralization because he didn't work in collaboration with federal department."

105. (d); The phrase "BY THE TIME" is used for saying what has already happened at the time that something else happens. The phrase can be used to connect only the sentences (D) and (B) to frame a coherent sentence. Other alternatives would alter the intended meaning of the sentences so formed. Hence option (d) is the correct choice.
By the time storm reaches New England, it's expected to gust with strong 30 to 50 mph winds, bringing dangerous, power line-snapping blizzard conditions and coastal flooding."

106. (e); Option (e) is a correct choice as other options tell us about what digital radio is and where it stands in comparison to FM while option (e) is in stark contrast and gives us information about the shortcomings of DAB . Hence option (e) is correct.

107. (d); Option (d) is not a part of coherent paragraph. As other options tell us about election campaigning system with their logical sequence being BCAE, option (d) tell us about the state funding which is different from the central theme of the paragraph. Hence option (d) is true.

108. (a); Option (a) is not a part of coherent paragraph. Other options tell us about the U.S. intervention in South China Sea and their logical sequence is CEBD while option (a) is not in harmony with the theme of the paragraph.

109. (e); All the given sentences are grammatically correct.

110. (e); In this sentence, use of 'He' is superfluous as the subject of 'Being' is 'Gopal'. It is to be noted that whenever a sentence containing Participle is used with only one Subject which does dual work, then a Subject is not required before Participle.
e.g. Being tired, he sat down. [= As he was tired, he sat down.]

111. (e); greater

112. (b); unhealthy

113. (c); generates

114. (d); deterioration

115. (a);

116. (c); "defining" is the correct word replacement as it means state or describe exactly the nature, scope, or meaning of. Here, defining is used to describe a whistle-blower. Other options do not fit into sentence in context of their meanings.

117. (d); "expose" is the correct word replacement as it means make (something) visible by uncovering it. It is to be noted that the verb it requires should be plural as the Subject it denotes is Plural (government officials). Hence based on Subject-Verb agreement and its meaning, option (d) is the correct choice.

118. (a); "progressive" is the correct word replacement as it means happening or developing gradually or in stages. The phrase "progressive expansion" adds meaning to the paragraph. Hence option (a) is the correct choice.

119. (b); "information" is the correct word replacement as it means what is conveyed or represented by a particular arrangement or sequence of things. Options (a), (c) and (d) can be easily eliminated as they can't be obtained under RTI Act. Hence "on the basis of information they obtained under the Right to Information (RTI) Act" makes a good choice.

120. (d); "empowered" is the correct word replacement as it means make (someone) stronger and more confident, especially in controlling their life and claiming their rights. Other options are neglected on the basis of their usage.

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Mock 46

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REASONING ABILITY

Directions (1–5): Study the following information carefully and answer the given questions.
E, F, G, H, I, J, K and L are sitting around a square table in such a way that four of them sit at four corners of the square while four sit in the middle of each of the four sides. The ones who sit at the four corners face the Centre, while those who sit in the middle of the sides face outside.
E who faces the Centre sits third to the right of J. I, who faces the Centre, is not an immediate neighbor of J. Only one person sits between J and K. H sits second to right of F. F faces the Centre. G is not an immediate neighbor of E.

1. Who sits second to the left of F?
(a) J (b) E (c) I
(d) L (e) Cannot be determined

2. What is the position of I with respect to J?
(a) Fourth to the left (b) Second to the left
(c) Third to the left (d) Third to the right
(e) Second to the right

3. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group?
(a) G (b) K (c) J
(d) H (e) L

4. Which of the following will come in place of the question mark (?) based upon the given seating arrangement?
KE, IG, FK, GH, ?
(a) LI (b) JL (c) JF
(d) EL (e) FJ

5. Which of the following is true regarding G?
(a) G is an immediate neighbor of J
(b) G faces the Centre
(c) G sits exactly between I and H
(d) F sits third to left of G
(e) None is true

Directions (6-10): In each question below are given three statements followed by two conclusions numbered I and II. You have to take the given statements to be true even if they seem to be at variance with commonly known facts and then decide which of the given conclusions logically follows from the given statements, disregarding commonly known facts. Give answer
(a) If only conclusion II follows.
(b) If neither conclusion I nor II follows.
(c) If either conclusion I or II follows.
(d) If only conclusion I follows.
(e) If both conclusions I and II follow.

6. **Statements:** No fruits are shops.
All grapes are chocolate.
All fruits are grapes.
Conclusions: I. Some chocolates are not shops.
II. No grapes are shops.

7. **Statements:** Some vats are services.
All services are property.
All demands are services.
Conclusions: I. Some vats are demands.
II. All demands are property.

8. **Statements:** No fruits are shops.
All grapes are chocolate.
All fruits are grapes.
Conclusions: I. All shops can be grapes.
II. Some chocolates are fruits.

9. **Statements:** Some windows are stairs.
Some chairs are stairs.
Conclusions: I. No windows are chairs.
II. Some chairs are windows.

10. **Statements:** Some vats are services.
All services are property.
All demands are services.
Conclusions: I. No vats are demands
II. Some demands are not vats.

Directions (11-15): Study the following information carefully and answer the question given below:
Seven Persons P, Q, R, S, T, U and V live on eight different floors of a building, but not necessarily in the same order. The lowermost floor of the building is numbered one; the one above it is number two and so on till the topmost floor is number seven and one floor is vacant.
V lives on fifth floor. P lives below U. Two person lives between V and T. Neither R nor U lives on sixth number floor. Q does not live on third number floor. S lives immediate below T. R lives above U. Q does not live on even numbered floor. More than one person lives between U and R.

11. Who among the following person lives on floor number Eight?
(a) R (b) P (c) S
(d) T (e) Q

12. Who lives immediate below P?
(a) S (b) V (c) T
(d) Q (e) None of these

13. Who lives on floor number Seven?
(a) S
(b) The floor is vacant.
(c) The person, who is immediate above vacant floor.
(d) T
(e) None of these

14. How many persons live between Q and R?
(a) None (b) Three (c) Two
(d) Four (e) None of these

15. If U is related to T in a certain way and P is related to S in the same way, then which of the following is related to R?
(a) V (b) Q
(c) None of these (d) U
(e) Vacant floor

Directions (16-18): Each of the questions given below consists of a question and two statements numbered I and II. You have to decide whether the data provided in the statements are sufficient to answer the question.
(a) If statement II by itself is sufficient to answer the question, but statement I alone is not sufficient to answer the question.
(b) If statement either I or II is sufficient to answer the question.
(c) If statement I alone is sufficient to answer the question, but statement II by itself is not sufficient to answer the question.
(d) If both the statements I and II taken together are not sufficient to answer the question.
(e) If both the statements I and II taken together are sufficient to answer the question.

16. How is M related to S?
I. Y is the son of R, who is father of Q. S is the children of Y. C is the brother of Q.
II. A is the son of Y, who is the husband of T. M is mother-in-law of T. Q is aunt of A.

17. A, B, C, D, E, F and G are sitting in a row facing north. Who among them is in the middle?
I. G is second from the left end. E is second from the right end of the row. Neither G nor E sits next to A.
II. D sits between A and C. Neither A nor C sits at the extreme end. G is third to the left of D and immediate right of F. C is right of A.

18. Which of the five movies P, Q, R, S and T is the best?
I. S movie is better than T, P and R movies but not as good as Q movie.
II. S movie is better than R movie but not as good as Q which is better than T movie.

Directions (19-23): Study the following information to answer the given questions.
In a certain code language,
'ram played the cricket' is written as 'mb gv hu st'
'played bat on ground' is written as 'tm hu da pu'
'on ram good behavior' is written as 'nh mk tm gv'
'ground goes the on' is written as 'da st rx tm'
(All codes are two letter codes only)

19. In the given code language, what does the code 'mk' stand for?
(a) Either 'ram' or 'the' (b) cricket (c) on
(d) Either 'behavior' or 'good' (e) goes

20. What is the code for 'ground' in the given code language?
(a) tm (b) rx
(c) st (d) da
(e) Other than those given as options

21. What is the code for 'played' in the given code language?
(a) nh (b) hu (c) gv
(d) pu (e) rx

22. What may be the possible code for 'ground bat' in the given code language?
(a) ve be (b) da nh (c) nh ve
(d) pu da (e) mb da

23. If 'on the home' is written as 'aj tm st' in the given code language, then what is the code for 'home bat cricket'?
(a) aj gv nh (b) pu aj mb (c) nh mb pu
(d) mb da aj (e) aj hu pu

Directions (24-28): Study the given information carefully and answer the given questions.
Ten people are sitting in two parallel rows containing five people each, in such a way that there is an equal distance between adjacent persons. In Row-1- A, B, C, D and E are seated (not necessarily in the same order). In Row-2-P, Q, R, S and T are seated (not necessarily in the same order). Some members are facing south and some members are facing north. Therefore, in the given seated arrangement each member seated in a row sits opposite to another member of the other row either facing to north or south.
Q is sitting extreme end of the row. P is third to the right of Q. D is an immediate left of E. Q faces north. R is not an immediate neighbour of P. T faces opposite direction to R. D sits immediate left of the person, who sits opposite to Q. Only one person sits between D and A. B is an immediate left of A. T is second to the left of S. Two persons sit between A and C. E does not sit opposite to T. D and P faces opposite directions. T is an immediate right of P. E sits second to the left of B. T is third to the left of R.

24. Who amongst the following sits opposite to E?
(a) T (b) Q
(c) None of these (d) S (e) P

25. Which of the following statements is true regarding D?
(a) D sits opposite to S.
(b) D faces south and sits immediate left of C.
(c) None of the given statements is true.
(d) Q sits opposite to the one, who sits immediate left of D.
(e) Only two person sits between D and A.

26. Who amongst the following sits opposite to C?
(a) R (b) S (c) Q
(d) T (e) P

27. What is the position of S with respect to T?
(a) Third to the right (b) Second to the right
(c) Immediate left (d) Immediate right
(e) Second to the left

28. Four of the given five are alike in a certain way based on the given arrangement and hence form a group. Which of them does not belong to that group?
(a) D (b) T (c) R
(d) C (e) S

Directions (29-30): Study the following information carefully to answer the given questions.
Point B is 12 m South of Point A. Point C is 24 m East of Point B. Point D is 8 m South of Point C. Point D is 12 m East of Point E and Point F is 8 m North of Point E. Point H is 20 m North of Point D. Point G is midpoint of the line A to H.

29. If a man has to travel to Point E from Point A (through these points by the shortest distance), which of the following points will be pass through first?
(a) Point C (b) Point D (c) Point F
(d) Point B (e) None of these

30. In which direction Point G with respect to Point B?
(a) West (b) South-East (c) North-East
(d) North-West (e) None of these

Directions (31-35): Study the following information carefully to answer the given questions:
Seven persons – A, B, C, D, E, F and G – are selling books in an order. A sells more books than G and D but less than E. C sells more books than F. D is not the third lowest person in the order. G or D is not the lowest person in the order. B is the second lowest person in the order. E does not sell the highest number of books. The Third lowest person sells 26 books and E sells 50 books.

31. How many possible number of books are sold by C?
(a) 49 (b) 46 (c) 61
(d) 26 (e) None of these

32. How many persons sell books more than G?
(a) Three (b) Four (c) Six
(d) None of these (e) Two

33. If G and F are together sell 34 books. Then how many possible books are sold by B?
(a) 7 (b) 17 (c) 26
(d) 35 (e) None of these

34. Which of the following statement is/are true?
(a) Only two persons sell books more than D.
(b) D sells 24 books.
(c) Only four persons sell books more than G.
(d) None are true.
(e) Only E sell books less than C.

35. Who sells third highest number of books?
(a) D (b) E (c) A
(d) None of these (e) B

Directions (36-40): Study the following information carefully to answer the given questions:
Ten persons A, B, C, D, E, P, Q, R, S and T attend seminar on different days of the week. Only two persons attend seminar on a day in the morning and in the evening. There are two times on a day in which seminars are organized i.e. 10 a.m. and 3 p.m. The days are starting from Monday to Friday.
P attends seminar on Wednesday on 3p.m. A attends seminar before P but not immediate before and he does not attend seminar on 3p.m. C does not attend seminar on Tuesday. T does not attend seminar on 3p.m. Only four persons attend seminar between C and R. C attends seminar before R. Only three persons attend seminar between Q and C. Q attends seminar in the morning. There are only four seminars were held between T and D. T attends seminar before D who does not attend seminar on Monday. There are two days gap between S and E. S attends seminar in the evening, but before E.

36. Who attend seminar on the Tuesday evening?
(a) D (b) T (c) A
(d) None of these (e) B

37. How many seminars are held between Monday evening seminar and Thursday evening seminar?
(a) Two (b) Five (c) Four
(d) Six (e) None of these

38. If Q is related to D in the same way as C is related to B. then which of the following is T related to, following the same pattern?
(a) E (b) P (c) A
(d) S (e) None of these

39. How many days are there between A's seminar and D's seminar?
(a) Two (b) Five (c) Four
(d) Three (e) None of these

40. Four of the following five are alike in a certain way and thus form a group. Which is the one that does not belong to that group?
(a) AB (b) QD (c) CD
(d) TC (e) TP

QUANTITATIVE APTITUDE

41. A container contains mixture of milk and water in which milk is 80%. 75% of mixture is taken out and 10l water is added, now the concentration of milk in the mixture is 60%. Find the quantity of milk initially.
(a) 90 l (b) 96 l (c) 72 l
(d) 64 l (e) None of these

42. The ratio of investment of A, B, C and D in a business is 2 : 3 : 5 : 7. A and B started the business initially, while C and D joined the business after 4 months. After 1 year the profit of C is equal to the average of the profit of A and D. i.e. 12000 Rs. Then find the Share of B.
(a) 10000 Rs (b) 10800 Rs (c) 12000 Rs
(d) 11000 Rs (e) None of these

43. The length of a rectangle is increased by 49.99%.While its breadth is decreased by 10.01%. Then find the percentage change in area.
(a) 35% increase (b) 45% increase
(c) 25% increase (d) 30% increase
(e) None of these

44. When Rs 6000 invested in a scheme for 6 years at x% simple interest per annum gives Rs 720 more interest as compared to the interest earned when the same principal is invested in another scheme for 4 years at (x + 2)% simple interest per annum. Find x
(a) 8% (b) 10% (c) 14%
(d) 12% (e) None of these

45. A shopkeeper bought 150 calculators at the rate of Rs. 250 per calculator. He spent Rs. 2500 on transportation and packing. If the marked price of calculator is Rs. 320 per calculator and the shopkeeper gives a discount of 5% on the marked price then what will be the percentage profit gained by the shopkeeper?
(a) 20% (b) 14% (c) 15%
(d) 16% (e) None of these

46. The average weight of 3 men A, B and C is 84 kg. Another man D joins the group and the average now becomes 80 kg. If another man E, whose weight is 3 kg more than that of D, replaces A, then average weight of B, C, D and E becomes 79 kg. the weight of A is:
(a) 70 kg (b) 72 kg (c) 74 kg
(d) 80 kg (e) None of these

47. A retailer purchases a sewing machine at a discount of 15% and sells it for Rs. 1955. In the bargain he makes a profit of 15%. How much is the discount which he got from the whole sale?
(a) Rs. 270 (b) Rs. 290 (c) Rs. 300
(d) 310 (e) None of these

48. The wheat sold by a shopkeeper contained 10% low quality wheat. What quantity of good quality wheat should be added to 150 kg of wheat so that percentage of low quality wheat becomes 5%?
(a) 50kg (b) 150 kg (c) 135 kg
(d) 75kg (e) None of these

49. An urn contains 6 red, 4 blue and 2 green balls. 3 balls are picked at random, find the probability that all the 3 balls are of same colour.
(a) $\frac{8}{55}$ (b) $\frac{9}{55}$ (c) $\frac{1}{11}$
(d) $\frac{7}{55}$ (e) None of these

50. 2 candles of the same height are lighted at the same time. The first is to be consumed in 5 hours and seconds in 4 hours. Assuming that they burn at constant rates, in how many hours their height will be in ratio 3 : 2 ?
(a) $\frac{20}{7}$ (b) $3\frac{1}{3}$ (c)4
(d) $3\frac{2}{3}$ (e) None of these

Directions (51–55): The following table provides information regarding employees of company X and Company Y in 4 different cities. Study it carefully and answer the following questions.

City	Company X		Company Y	
	Total employees	Male : Female	Total Employees	Male : Female
Delhi	760	11 : 8	810	4 : 5
Chennai	450	2 : 3	680	8 : 9
Chandigarh	560	5 : 3	620	17 : 14
Kolkata	640	9 : 7	720	11 : 7

51. What is the ratio the no. of females in Delhi in company X to the no. of females in Kolkata in the same Company ?
(a) 8 : 5 (b) 5 : 8 (c) 8 : 7
(d) 7 : 8 (e) None of these

52. What is the total no. of females in company Y in all 4 cities together?
(a) 1370 (b) 1350 (c) 1310
(d) 1300 (e) None of these

53. The no. of males in Company Y in Delhi and Chennai Together is approximately what percent of the no. of females in Company X in Chandigarh and Kolkata?
(a) 135% (b) 145% (c) 139%
(d) 149% (e) 152%

54. Total males in company Y is approximately what percent of total employees in company Y?
(a) 50% (b) 52% (c) 54%
(d) 56% (e) 58%

55. In how many cities the no. of females in company Y are more than no. of females in company X?
(a) 0 (b) 1 (c) 2
(d) 3 (e) 4

Direction (56-60): Due to demonetization of 500 Rs. and 1000 Rs. note, following rules are applicable to the people in the country —

	Max Credit Limit per day in a Bank	Max Withdrawal limit per day from Bank	% Penalty on Tax collected by govt.
Senior Citizen	2,50,000 Rs.	40,000 Rs.	30%
Male	5,00,000 Rs.	65,000 Rs.	55%
Female	5,00,000 Rs.	50,000 Rs.	45%
Children	10,00,00 Rs.	10,000 Rs.	20%

Note- 1. Following age group will be applicable-
1. 0 – 8 years old → children
2. 9 – 45 Male / Female
3. < 45 senior citizen

Note-2. Following tax slabs will be applilcable-
1. No tax → 0 – 250000 Rs.
2. 10% → 250000 - 500000 Rs.
3. 20% → 500000 - 1000000 Rs.
4. 30% → <1000000 Rs.

56. Babu, 56 years old has 5 crore black money. How much money (in crores) will he get after giving tax to the govt. and penalty on it ?
(a) 2.95 (b) 3.05 (c) 3.95
(d) 4.05 (e) 0.95

57. Ram, 35 years old has black money amounts to 3,25,000Rs. On which day he will get all of his money after giving tax and penalty if he visits bank on daily basis and withdraw maximum amount.
(a) 4th (b) 5th (c) 3rd
(d) 6th (e) 7th

58. If the credit limit per day in Bank for senior citizen is increased by 20% and the withdrawal limit per day from bank for senior citizen is increased by 50% then find the ratio of credit limit per day to the withdrawal limit per day after increment for senior citizen?
(a) 2 : 1 (b) 3 : 1 (c) 4 : 1
(d) 7 : 1 (e) 5: 1

59. Govt. said that there will be investment of 25% out of the total amount recovered as tax and penalty on tax in Garib Kalyan Yojana scheme. If Gopal,26 year old has 20 crore black money then find how much money will be invested in Garib Kalyan Yojana scheme?
(a) 2,32,50,000 (b) 34,32,50,000
(c) 1,19,40,000 (d) 4,05,10,000
(e) None of these

60. Find the difference between the days required to withdraw 52,00,000Rs. money under a male bank account to the days required to withdraw 5,00,000Rs. money under a children Bank account?
(a) 25 days (b) 20 days (c) 40 days
(d) 30 days (e) None of these

61. P and Q entered into partnership investing Rs 12000 and Rs 16000 respectively. After 8 months, R also joins the business with a capital of Rs 15000. The share of R in a profit of Rs 45600 after 2 years will be :
(a) 24000 (b) 16000 (c) 12000
(d) 11400 (e) None of these

62. When the price of sugar was increased by 20%, a family reduced its consumption in such a way that the expenditure on sugar is only increased by 15%. If 24 kg were consumed per month before the increase in price, find the new monthly consumption.
(a) 22 kg (b) 23 kg (c) 23.5 kg
(d) 22.5 kg (e) None of these

63. A person covered 9 km at 3 km/h, 25 km at 5 km/h and 30 km at 10 km/h. Then find the average speed in covering the whole distance.
(a) $5\frac{2}{11}$ km/h (b) $5\frac{5}{11}$ km/h (c) $5\frac{7}{11}$ km/h
(d) 6 km/h (e) None of these

64. A dishonest dealer sells the goods at 10% loss on cost price but uses 20% less weight. What is his percentage profit a loss?
(a) 12.5% gain (b) 12.5% loss (c) $16\frac{2}{3}$%loss
(d) $16\frac{2}{3}$ gain (e) None of these

65. Two pies A and B can fill a tank in 30 minutes and 45 minutes respectively. Both pipes are opened. The tank will be filled in just 20 minutes, if the pipe B is turned off after :
(a) 10 minutes (b) 18 minutes (c) 8 minutes
(d) 15 minutes (e) None of these

66. In a voyage of 600 km, a ship was slowed down due to bad weather and storm in Ocean. Its average speed for the trip was reduced by 200 km/hr, and the time of trip increased by 30 minutes. The duration of the voyage is:
(a) 1 hour (b) 2 hour (c) $1\frac{1}{3}$ hour
(d) $1\frac{1}{2}$ hour (e) $1\frac{2}{3}$ hour

67. After replacing an old member by a new member, it was found that the average age of four members of a family is the same as it was 3 year ago. What is the difference between the ages of the replaced and the new member ?
(a) 10 years (b) 11 years (c) 12 years
(d) 8 years (e) None of these

68. Ramesh borrowed 830 Rs. from Sanjeev at 12% p.a. S.I. for 3 years. He then added some more money to the borrowed sum and lent it to Rajesh for the same period of time at 14% p.a. S.I. If Ramesh gains Rs. 93.90 in the whole transaction, how much money did he add from his side ?

(a) Rs. 35 (b) Rs. 55 (c) Rs.80
(d) Rs. 105 (e) None of these

69. In what time will be Rs. 390625 amount to Rs. 456976 at 4% compound interest ?
(a) 2 years (b) 3 years (c) 4 years
(d) 5 years (e) None of these

70. The length of rectangular floor is twice its breadth. If Rs 256 is required to paint the floor at the rate Rs 2 per sq m, then what would be the length of floor?
(a) 16 m (b) 8 m (c) 12 m
(d) 32 m (e) 20 m

Directions (71-75): In each of the following questions, 2 statements are given , you have to determine that which statement/statements are necessary to answer the question and give answer:
(a) If statement I alone is sufficient but statement II alone is not sufficient
(b) If statement II alone is sufficient but statement I alone is not sufficient
(c) Either statement I or statement II alone is sufficient
(d) Statement I and statement II even together are not sufficient
(e) Statement I and statement II together are sufficient

71. What is the area of the rectangle?
Statement I → Length of the rectangle is equal to the radius of a circle whose circumference is 132 cm.
Statement II → breadth of the rectangle is $20\frac{5}{6}\%$ of the perimeter of the rectangle.

72. $x^2 + y^2 = ?$
Statement I→ $\frac{x^2}{7} - x + \frac{12}{7} = 0$
Statement II→ $x + y = 9, \frac{1}{x} + \frac{1}{y} = \frac{1}{2}$

73. In what time the 2 trains cross each other while running in the same direction?
Statement I→ The first train crosses a pole in 9 seconds
Statement II→ The Ist train crosses the second running in opposite direction in 45 seconds, Ratio of speed of Ist train to 2nd train is 2 : 3

74. What is the marked price of the article?
Statement I→ The article is sold at 15% discount on market price still making a gain of 16 Rs
Statement II→ The difference between the marked price and selling price is 50% more than the difference between Selling price and cost price.

75. 40 students sit in rows and columns. How many students are seated in each column?
Statement I- The number of rows is 62.50% of the number of columns.
Statement II- The number of rows is 5/8 of the number of columns.

Directions (76-80): In each of these questions, two equations (I) and (II) are given. You have to solve both the equations and give answer
(a) if x>y
(b) if x≥y
(c) if x<y
(d) if x ≤y
(e) if x = y or If there is no relation between 'x' and 'y'.

76. I. $2x^2-21x+54=0$
II. $y^2-14y+49=0$

77. I. $x^2-19x+70=0$
II. $2y^2-17y+35=0$

78. I. $3x^2+5x-8=0$
II. $y^2-4y+3=0$

79. I. $12x^2-16x+5=0$
II. $18y^2-45y+25=0$

80. I. $3x^2-11x+8=0$
II. $3y^2+20y+32=0$

ENGLISH LANGUAGE

Directions (81-90): Read the following passage carefully and answer the questions given below it. Certain words have been printed in bold to help you locate them, while answering some of the questions.
The strength of Indian Democracy lies in its tradition, in the fusion of the ideas of democracy and national independence which was the characteristic of the Indian Nationalist Movement long before independence. Although the British retained supreme authority in India until 1947, the provincial elections of 1937 provided real exercise in democratic practice before national independence. During the Pacific war India was not overrun or seriously invaded by the Japanese and after the war was over, the transfer of power to a government of the Indian Congress Party was a peaceful one as far as Britain was concerned. By 1947 **'Indianisation'** had already gone far in the Indian Civil Service and Army, so that the new government could start with effective instruments of central control.
After independence, however, India was faced with two vast problems; the first, that of economic growth from a very low level of production and the second was that of ethnic diversity and the aspirations of sub nationalities.

The Congress leadership was more aware of the former problem than of the second. As a new political elite which had rebelled not only against the British Raj but also against India's old social order, they were conscious of the need to initiate economic development and undertake social reforms, but as nationalists who had led a struggle against the alien rule on behalf of all parts of India, they took the cohesion of the Indian nation too much for granted and underestimated the centrifugal forces of ethnic division, which were bound to be **accentuated** rather than diminished as the popular masses were more and more drawn into politics. The Congress party was originally opposed to the idea of recognizing any division of India on a linguistic basis and preferred to retain the old provinces of British India which often cut across linguistic boundaries. However, this was later conceded as the basis for a federal 'Indian Union'. The rights granted to the States created new problems for the Central Government. The idea of making Hindi the national language of a united India was thwarted by the recalcitrance of the speakers of other important Indian languages and the autonomy of the States rendered central economic planning extremely difficult. Land reforms remained under the control of the States and many large-scale economic projects required a degree of cooperation between the Central Government and one or more of the States which, it was found, was impossible to achieve. Coordination of policies was difficult even when the Congress party was in power both in the State and at the Centre. When a Congress Government in Delhi was confronted with non-Congress parties in office in the States, it became much harder.

81. Why central economic planning was found to be difficult?
(a) Multiplicity of States and Union Territories
(b) Lack of coordination in different Government departments
(c) Autonomy given to the States in certain matters
(d) Lack of will in implementing land reforms
(e) None of the above

82. Which of the following problems were faced by India after Independence?
(a) Military attack from a country across the border.
(b) Lack of coordination between the Central and State Governments.
(c) Improper coordination of various Government policies
(d) Increasing the production from a very low level
(e) None of the above

83. Which of the following issues was not appropriately realized by the Central Government.
(a) Ethnic diversity of the people
(b) A national language for the country
(c) Implementation of the formulated policies
(d) Centre -State relations
(e) None of the above

84. Which, according to the passage, can be cited as an exercise in democratic practice in India before Independence?
(a) The handing over of power by the British to India
(b) The Indianisation of the Indian Civil Service
(c) A neutral role played by the Army
(d) Both (a) and (b)
(e) None of the above

85. Which of the following statements is NOT TRUE in the context of the passage?
(a) The congress Party was originally opposed to the idea of division of States on linguistic basis.
(b) Economic development and social reforms were initiated soon after Independence.
(c) The political elite in India rebelled against the British Raj.
(d) The Congress leadership was fully aware of the problem of ethnic diversity in India at the time of Independence.
(e) By 1947, Indian Army was fairly Indianised.

86. Which of the following words is most opposite to the word '**accentuated**'?
(a) Mask (b) Emphasize (c) Highlight
(d) Accent (e) Foreground

87. The provincial elections of 1937 in India showed that the
(a) supremacy of British in India was likely to be short-lived.
(b) India was capable of bringing into practice the ideas of democracy.
(c) Indian Congress was the single largest party in India.
(d) British Rule was not popular in India.
(e) Indian were peace-loving people.

88. The new government could start with effective instrument of central power after independence because the
(a) process of Indianisation of the Indian Civil Service had already started.
(b) Indian army was organized on the pattern of British Army.
(c) people of India offered their whole-hearted support to the Government.
(d) transfer of power to the Indian Congress Partly was peaceful.
(e) None of the above

89. Which of following statements is TRUE in the context of the passage?
(a) After Independence, India was faced with the problem of linguistic diversity of the people.
(b) During the Pacific War, India was invaded by Japan.

(c) Congress leadership was not as much aware of the problem of ethnic diversity as much as of low production.
(d) Social reforms were neglected by the Government.
(e) Land reforms were under the control of the Central Government.

90. Why was India not overrun by the Japanese during the Pacific War?
(a) Japan had friendly relations with Britain.
(b) Japan was interested in India's freedom from the British Rule.
(c) It was not an advantageous proposition for Japan from the military perspective.
(d) Japan was skeptical about its success in the war.
(e) None of the above

Directions (91–95): Read the following passage carefully and answer the questions given below it.

The outside world has pat answers concerning extremely Impoverished countries, especially those in Africa. Everything comes back, again and again, to corruption and misrule. Western officials argue that Africa simply needs to behave itself better, to allow market forces to operate without interference by corrupt rulers. Yet the critics of African governance have it wrong. Politics simply can't explain Africa's prolonged economic crisis. The claim-that Africa's corruption is the basic source of the problem does not withstand serious scrutiny. During the past decade I witnessed how relatively well-governed countries in Africa: such as Ghana, Malawi Mali and Senegal, failed to prosper, whereas societies in Asia perceived to have extensive corruption such as Bangladesh, Indonesia and Pakistan, enjoyed rapid economic growth.

What is the explanation? Every situation of extreme poverty around the world contains some of its own unique causes, which need to be diagnosed as a doctor would a patient. For example. Africa is burdened with malaria like no other part of the world, simply because it is unlucky in providing the perfect conditions for that disease; high temperatures, plenty of breeding sites and particular species of malaria-transmitting mosquitoes that prefer to bite humans rather than cattle.

Another myth is that the developed world already gives plenty of aid to the world's poor. Former U.S. Secretary of the Treasury, Paul O'Neil expressed a common frustration when he remarked about aid for Africa : "We've spent trillions of dollars on these problems and we have damn near nothing to show for it". O'Neil was no foe of foreign aid. Indeed, he wanted to fix the system so that more U.S. aid could be justified. But he was wrong to believe that vast flows of aid to Africa had been squandered. President Bush said in a press conference in April 2004 that as "the greatest power on the face of the earth, we have an obligation to help the spread of freedom. We have an obligation to feed the hungry". Yet how does the U.S. fulfill its obligation? U.S. aid to farmers in poor countries to help them grow more food runs at around $200 million per year, far less than Si per person per year for the hundreds of millions of people living in subsistence farm households.

From the world as a whole, the amount of aid per African per year is really very small, just $30 per sub-Saharan African in 2002. Of that modest amount, almost $5 was actually for consultants from the donor countries, more than $3 was for emergency aid, about $4 went for servicing Africa's debts and $ 5 was for debt-relief operations. The rest, about $12, went to Africa. Since the "money down the drain" argument is heard most frequently in the U.S., it's worth looking at the same calculations for U.S. aid alone. In 2002, the U.S. gave $3 per sub-Saharan African. Taking out the parts for U.S. consultants and technical cooperation, food and other emergency aid, administrative costs and debt relief, the aid per African came to grand total of 6 cents. The U.S. has promised repeatedly over the decades, as a signatory to global agreements like the Monterrey Consensus of 2002, to give a much larger proportion of its annual output, specifically upto 0.7% of GNP, to official development assistance. The U.S. failure to follow through has no political fallout domestically, of course, because not one in a million U.S. citizens even knows of statements like the Monterrey Consensus. But no one should underestimate the salience that it has around the world. Spin as American might about their nation's generosity, the poor countries are fully aware of what the U.S. is not doing.

91. The passage seems to emphasize that the outside world has
(a) correct understanding about the reasonable aid provided by the USA to the poor countries
(b) definite information about what is happening in under developed countries
(c) stopped extending any financial aid to under developed countries
(d) misconceptions about the aid given to the poor nations by developed countries
(e) None of these

92. According to the Westerners the solution to eradicate poverty of African nations lies in
(a) corruption
(b) improving their own national behavior
(c) misrule
(d) prolonged economic crisis
(e) None of these

93. The author has given the example of Bangladesh, Indonesia and Pakistan in support of his argument that
(a) corruption is the major culprit in the way of prosperity
(b) mis-governance hampers the prosperity of nations
(c) despite rampant corruption, nations may prosper
(d) developed nations arrogantly neglect under developed countries
(e) None of these

94. The author has mentioned Ghana as a country with
(a) reasonably good-governance
(b) corrupt leadership
(c) plenty of natural resources
(d) rapid economic growth
(e) None of these

95. The cases of malaria in Africa are mainly due to
(A) high temperature
(B) climatic conditions Conducive for breeding.
(C) malaria carriers liking for human blood in preference to that of cattle
(a) None of these (b) Only B and C
(c) Only A and C (d) Only A and B
(e)All the three

Directions (96-100): In each of the following sentences there are two blank spaces. Below each sentence there are five pairs of words denoted by numbers (a), (b), (c), (d) and e). Find out which pair of words can be filled up in the blanks in the sentence in the same sequence to make it meaningfully complete.

96. _____ by popular support, the Supreme Court of Pakistan is trying to _____ its independence.
(a) empowered, sentence
(b) governed, stamp
(c) backed, assert
(d) marked, rebel
(e) geared, influence

97. One lesson that must be drawn from the grisly ____ of fake encounter killings is the need to _____ the police from its political masters.
(a) incidence, govern (b) episode, insulate
(c) crime, motivate (d) theory, widen
(e) malaise, revolt

98. MP's should, by all means, take the government to ___ when it fails in _____ its responsibilities.
(a) book, abdicating
(b) proceedings, depicting
(c) query, driving
(d) criticism, abiding
(e) task, discharging

99. No political party can claim ___ to the trend of holding up parliamentary _____ on some pretext or the other.
(a) exception, proceedings
(b) emancipated, debates
(c) above, sessions
(d) freedom, functions
(e) supreme, dealings

100. It is pointless to legislate well-meaning laws if there is no fair and effective ____ to ___ them.
(a) monitoring, realising
(b) transparency, forward
(c) methodology, sentencing
(d) mechanism, implement
(e) screening, process

Directions (101-105): In each of the question given below a/an idiom/phrase is given in bold which is then followed by five options which then tries to decipher its meaning as used in the sentence. Choose the option which gives the meaning of the phrase most appropriately in context of the given sentence.

101. You must be in **a fool's paradise** if you think that it will rain at the time of such hot summers.
(a) illusory happiness (b) critical
(c) situation (d) world
(e) fooleries

102. He will have one more **feather in his cap** after he has finished this incredibly difficult assignment.
(a) achievement (b) integration (c) admiration
(d) surprise (e) motivation

103. Everybody else knew each other really well, so I felt a bit like **a fish out of water.**
(a) alliance (b) accomplished
(c) accommodate (d) insidious
(e) obliterated

104. I just need to get my **foot in the door**, and then I can move up.
(a) agreement (b) associate (c) affiliation
(d) action (e) fraternization

105. One must be able to control their anger and not just bring their **bunch of fives** to every event.
(a) association (b) punch (c) passel
(d) bundle (e) club

Directions (106-110): Read each sentence to find out whether there is any grammatical error in it. The error, if any, will be one part of the sentence. The number of that part is the answer. If there is no error, the answer is (e). (ignore the errors of punctuation, if any.)

106. It has almost become (a)/ axiomatic to stress (b)/ that technology is (c)/ not neutral. (d)/ No error (e)

107. All national governments (a)/ have at one time (b)/ or at the other (c)/ dealt with these kinds of policies. (d)/ No error (e)

108. He developed certain measures (a)/ and indicators to (b)/ determining the standards for (c)/ living and growth of human resources. (d)/ No error (e)

109. The country has made (a)/ considerable progress in (b)/ the sphere of education (c)/ over the past four decades. (d)/ No error (e)

110. Let us for once (a)/ hope that the (b)/ government pronouncements are (c)/ translated towards action. (d)/ No error (e)

Directions (111-120): In the following passage there are blanks, each of which has been numbered. These numbers are printed below the passage and against each, five words are suggested, one of which fits the blank appropriately. Find out the appropriate words without changing the meaning of the passage.

Among the (111) of modern India Dr. Bhimrao Ambedkar holds an important place. In the span of about four decades Ambedkar (112) through various phases. The nation has paid its warmest (113) to his heroic deeds and selfless services to the down-trodden by celebrating his birth centenary recently. Ambedkar's thirst to knowledge, his passion for books and his (114) were unique. He was a (115) reader and had a good command over seven languages. He (116) himself in history, Economics, politics, Law and constitution. He (117) the constitution through the Constituent Assembly and is popularly known as the main (118) of the Indian Constitution. He worked (119) hard that he completed all his assignments in time. Ambedkar belonged to the Maher community of Maharashtra. Among the (120) communities in the gold of Hindi society, the Mashers are a robust adaptable intelligent, brave and leading community.

111. (a) Constructors (b) builders (c) workers
(d) destructors (e) Thinkers

112. (a) went (b) caught (c) hid
(d) looked (e) passed

113. (a) welcome (b) homage (c) devotion
(d) reception (e) Contribution

114. (a) greed (b) manipulation
(c) recognition (d) qualification
(e) Erudition

115. (a) talkative (b) voracious
(c) worth looking (d) intelligent
(e) Skilled

116. (a) distinguished (b) made (c) placed
(d) got (e) found

117. (a) constituted (b) handed (c) piloted
(d) manipulated (e) Formed

118. (a) worker (b) linguist (c) founder
(d) architect (e) entertainer

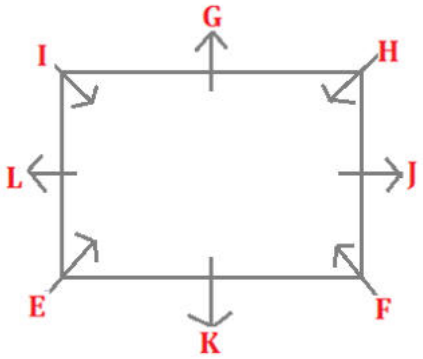
119. (a) Very (b) much (c) so
(d) quite (e) too

200. (a) different (b) various (c) poor
(d) prosperous (e) Untouchable

Solutions

REASONING ABILITY

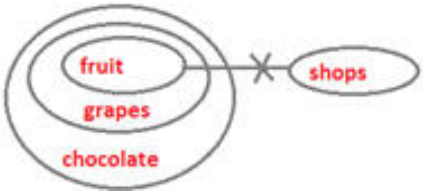
Direction (1-5);



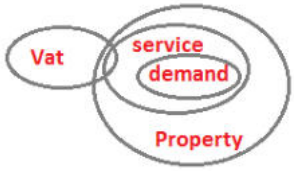
1. (b); **2. (c);** **3. (d);**

4. (a); **5. (c);**

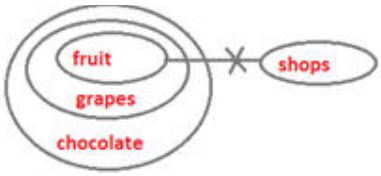
6. (d);



7. (a);

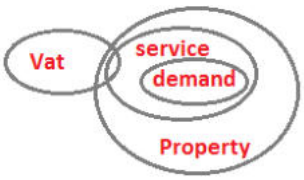


8. (e);



9. (c);

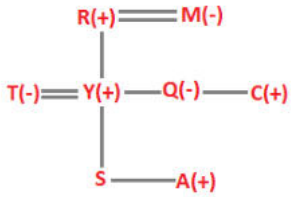
10. (b);



Direction (11-15);

Floor	Person
8	R
7	Q
6	Vacant floor
5	V
4	U
3	P
2	T
1	S

11. (a);
12. (c);
13. (c);
14. (a);
15. (e);
16. (e); From I and II-



17. (b); From I.

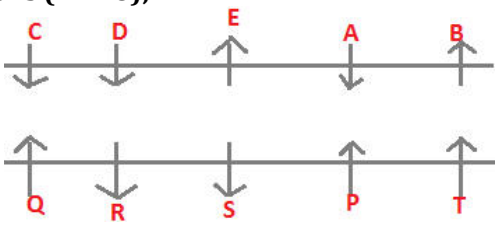
From II.

18. (c); Using only first statement, we can say that Q is the best movie.

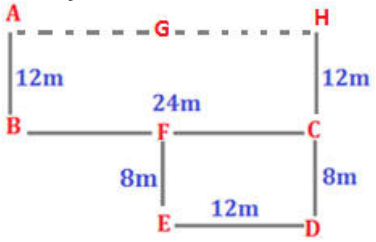
Direction (19-23);

Word	Code
Ram	gv
Played	hu
The	st
On	tm
Cricket	mb
Ground	da
Bat	pu
Goes	rx
Good/ behavior	mk/nh

19. (d);
20. (d);
21. (b);
22. (d);
23. (b);
Directions (24-28);



24. (d);
25. (b);
26. (c);
27. (e);
28. (b);
Directions (29-30);



29. (d);
30. (c);
Directions (31-35);

C > E > A > D > G > B > F
50 26

31. (c);
32. (b);
33. (b);
34. (c);
35. (c);
Directions (36-40);

Day	Morning- 10a.m.	Evening- 3p.m.
Monday	A-10a.m.	S-3p.m.
Tuesday	T-10a.m.	B-3p.m.
Wednesday	C-10a.m.	P-3p.m.
Thursday	E-10a.m.	D-3p.m.
Friday	Q-10a.m.	R-3p.m.

36. (e);
37. (b);
38. (d);
39. (a);
40. (d);

QUANTITATIVE APTITUDE

41. (b); Let initial quantity = 5x

Milk	Water
4x	x
$\frac{-3x}{x}$	$\frac{-0.75x}{0.25x + 10}$

$\frac{x}{(0.25x + 10)} = \frac{3}{2}$
1.25x = 30
x = 24 l
initial quantity of milk = 4x = 96 l

42. (b); Ratio of profit $2 : 3 : 5 \times \frac{2}{3} : 7 \times \frac{2}{3}$
= 6 : 9 : 10 : 14
Share of B = $\frac{18}{20} \times 12000 = 10800$ Rs

43. (a); Let initially length = l, Breadth = b
Area = lb
New area = 1.5 l × 0.9b = 1.35 lb
% age increase = 35%

44. (b); Let Principal = Rs 100
$= \frac{6000 \times x \times 6}{100} - \frac{6000 \times (x+2) \times 4}{100} = 720$
$x = 10\%$

45. (b); Total cost price $= (150 \times 250) + 2500$
= 37500 + 2500 = 40000
Total selling price $= 320 \times \frac{(100-5)}{100} \times 150$
= 45600
Profit percentage $= \frac{45600 - 40000}{40000} \times 100 = 14\%$

46. (e); A + B + C = 84 × 3 = 252
A + B + C + D = 80 × 4 = 320
Age of D = 320 − 252 = 68
Age of E = 71
B + C + D + E = 316
B + C = 316 – (68 + 71)
B + C = 177
Age of A = 252 − 177 = 75 years

47. (c); C.P. to the retailer $= 1955 \times \frac{100}{115} = 1700$
But it is at a discount of 15%, M.P.
$= 1700 \times \frac{100}{85} = 2000$
Total discount = 2000 − 1700 = Rs. 300

48. (b); Initially low quality wheat=10% of 150=15kg
High quality wheat=150-15=135kg
15kg of low quality wheat will be 5% of the final quantity of wheat
Final quantity of wheat= $\frac{100}{5} \times 15 = 300$kg
Quantity of high quality wheat=300-15=285kg
High quality wheat added=285-135=150kg

49. (e); Required probability = $({}^{6}C_3 + {}^{4}C_3) \div ({}^{12}C_3) = \frac{6}{55}$

50. (a); Per hour consumption of Ist candle = $\frac{1}{5}$
per hour consumption of IInd candle = $\frac{1}{4}$
Let after x hour their height is in ratio = 3 : 2
$then, \frac{1-\left(x \times \frac{1}{5}\right)}{1-\left(x \times \frac{1}{4}\right)} = \frac{3}{2}$
Solving the equation, x = $\frac{20}{7}$

51. (c); Required ratio $= \frac{760 \times \frac{8}{19}}{640 \times \frac{7}{16}} = 8 : 7$

52. (a); Total no. of females in company Y
= 450 + 360 + 280 + 280 = 1370

53. (c); No. of males in Delhi and Chennai = 360 + 320
= 680
No. of females in Chandigarh and Kolkata together
= 210 + 280 = 490
Required percentage $= \frac{680}{490} \times 100 \approx 139\%$

54. (b); Required percentage $= \frac{1460}{2830} \times 100 \approx 52\%$

55. (d); Except Kolkata, in all cities the no. of females in company Y are more than the no. of females in company X

56. (b); Tax = $\frac{30}{100} \times 5\ crore$
= 1.5 crores
Penalty = $\frac{30}{100} \times 1.5$ crore
= 0.45 crore
Total Tax = 1.5 + 0.45
= 1.95 crore
∴ Required money = (5 − 1.95)
= 3.05 crores.

57. (b); Money that he will get → $3{,}25{,}000 - \frac{10}{100} \times 3{,}25{,}000 - \frac{55}{100} \times \left(\frac{10}{100} \times 3{,}25{,}000\right)$
= 2,74,625Rs.
∴ Required no. of day = $\frac{274625}{65000}$
= 4.225 ≈ 5th day

58. (e); Required Ratio = $\frac{3{,}00{,}000}{60{,}000}$
= $\frac{30}{6}$
= 5 : 1

59. (a); Tax = $\frac{30}{100} \times 20$ crore
= 6 crore
Penalty = $\frac{55}{100} \times 6$ crore
= 3.3 crore
∴ Total tax → 9.3 crores
∴ Required amount = $\frac{25}{100} \times 9.3$ crores
= 2.325 crores
= 2,32,50,000

60. (d); Required days = $\frac{5200000}{65000} - \frac{500000}{10000}$
= 80 – 50 = 30 days

61. (c); Share of C = $\frac{(15000 \times 16)}{(12000 \times 24) + (16000 \times 24) + (15000 \times 16)}$
= 12000 Rs.

62. (b); Let the price before increase = x
Then new price = $\left(\frac{100 + 20}{100}\right) x = 1.2x$
$\frac{115}{100} \times (x \times 24) = 1.2x \times y$
(y = new consumption quantity)
$y = 23\ kg$

63. (e); Average speed = $\frac{Total\ distance\ covered}{Total\ time\ taken}$
= $\frac{64}{11} = 5\frac{9}{11}$ km/h

64. (a); Let CP = Rs 1000
SP at 10% loss = $\frac{(100 - 90)}{100} \times 1000 = 900\ Rs$
But actual CP = $1000 \times \frac{(100 - 20)}{100} = 800\ Rs$
Profit percentage = $\frac{(900 - 800)}{800} \times 100 = 12.5\%$

65. (d); Let pipe B be turned off after x minutes
$\therefore$ part filled by (A + B) in x min. + part filled by A in $(20 - x)$ min. = 1
or, $\left(\frac{1}{30}+\frac{1}{45}\right)x\,(20-x)\frac{1}{30}=1$
or, $\frac{5x}{90}-\frac{x}{30}=\frac{10}{30}$
or, $x = 15$ minutes.

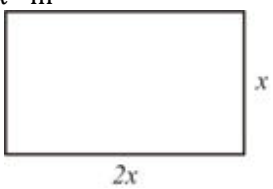
66. (a); Let the duration be x hours.
ATQ, $\frac{600}{x}-\frac{600}{x+\frac{1}{2}}=200$
or, $\frac{600}{x}-\frac{1200}{2x+1}=200 \approx 2x^2+x-3=0$
It gives $x = 1$ hour.

67. (c); Let the sum of their present ages= x years.
Ater replacing, sum of their ages
= x – (4 × 3) = x – 12 years
Thus, required difference in age of two members = 12 years.

68. (d); Let the added money be x.
Then, $\frac{(830+x)\times 14\times 3}{100}-\frac{830\times 12\times 3}{100}=93.90$
or, $34860 + 42x - 29880 = 9390$
or, $x =$ Rs. 105.

69. (c); ATQ $456976 = 390625\left(1+\frac{4}{100}\right)^n$
or, $\left(1+\frac{4}{100}\right)^n=\frac{456976}{390625}=\left(\frac{26}{25}\right)^4$
or, $n = 4$ years.

70. (a); Area = $2x^2$ m²



$\therefore 2x^2 \times 2 = 256$
$x^2 = 64$
x = 8
$\therefore$ Required length = $2 \times 8 = 16$ m

71. (e); **I.** $\rightarrow l = r = \frac{132}{44}\times 7 = 21$ cm
II. $\rightarrow 2l+\left(\frac{5}{24}P\right)\times 2 = P$
$P = \frac{12}{7}\times 2l = 72$ cm
$b = 36 - 21 = 15$ cm
$area = 21 \times 15 = 315$ cm²
So both I & II are neccssary

72. (b); **I.** $\rightarrow$ x = 3, 4
II. $\rightarrow$ x = 3, y =6 or y = 3, x = 6
$x^2 + y^2 = 45$
Statement II alone is sufficient

73. (b); Let length of Ist train = L_1
Length of IInd train = L_2
1. $\rightarrow \frac{L_1}{2x} = 9$
2. $\rightarrow \frac{L_1+L_2}{(3x+2x)} = 45$
$\frac{L_1+L_2}{5x} = 45$
But when running in same direction relative speed will be
$3x - 2x = x$
$\frac{L_1+L_2}{x} = 45 \times 5 = 225$seconds
So Statement II alone is sufficient

74. (d); **1.** $\rightarrow$ Discount = 15%
SP – CP = 16 Rs
2. $\rightarrow$ MP – SP = $\frac{150}{100}\times 16 = 24$ Rs
So even using both statements, we can't find the marked price of the article.

75. (c); Let there are x no. of columns
St. I – $0.625x \times x = 40$, $x^2 = 64$
x = 8, no. of rows = 5
student in each column = 5
St. II – $\frac{5}{8}x \times x = 40, x^2 = 64, x = 8$
no. of rows = 5
So either I or II is sufficient to answer the question

76. (c); $2x^2 - 12x - 9x + 54 = 0$
$2x(x-6) - 9(x-6) = 0$
$x = 6, \frac{9}{2}$
$y^2 - 7y - 7y + 49 = 0$
$y\,(y-7) - 7(y-7) = 0$
$y = 7, 7$
$x < y$

77. (b); $x^2 - 14x - 5x + 70 = 0$
$x(x-14) - 5(x-14) = 0$
$x = 5, 14$
$2y^2 - 10y - 7y + 35 = 0$
$2y(y-5) - 7(y-5) = 0$
$y = 5, \frac{7}{2}$
x ≥ y

78. (d); $3x^2 + 8x - 3x - 8 = 0$
$x(3x+8) - 1(3x+8) = 0$
$x = 1, \frac{-8}{3}$
$y^2 - y - 3y + 3 = 0$
$y(y-1) - 3(y-1) = 0$
$y = 1, 3$
$x \le y$

79. (d); $12x^2 - 6x - 10x + 5 = 0$
$6x(2x-1) - 5(2x-1) = 0$
$x = \frac{1}{2}, \frac{5}{6}$
$18y^2 - 30y - 15y + 25 = 0$
$6y(3y-5) - 5(3y-5) = 0$
$y = \frac{5}{3}, \frac{5}{6}$
$x \le y$

80. (a); $3x^2 - 3x - 8x + 8 = 0$
$3x(x-1) - 8(x-1) = 0$
$x = 1, \frac{8}{3}$
$3y^2 + 12y + 8y + 32 = 0$
$3y(y+4) + 8(y+4) = 0$
$y = -4, \frac{-8}{3}$
x > y

ENGLISH LANGUAGE

81. (c); Refer to the 14th line of the second paragraph "… the autonomy of the states extremely difficult."

82. (d); Refer the first sentence of the second paragraph.

83. (a); Refer the second sentence of the second paragraph.

84. (e); Refer the second sentence of the first paragraph.

85. (d); Refer the second sentence of the second paragraph.

86. (a); Accentuate means to make more noticeable or prominent hence mask is the word most opposite in meaning.

87. (b); Refer to the 4th line of the 1st paragraph, "…real exercise in democratic practice …" (first paragraph)

88. (a); Refer the last sentence of the first paragraph.

89. (c); Refer the second sentence of the second paragraph.

90. (e); The cause is not mentioned in the passage.

91. (d); Third paragraph of the passage says: "Another myth is that the developed world already gives plenty of aid to the world's poor". This clearly indicates the outside world has misconceptions about the aid given to the poor nations by developed countries. So, (c) is the correct option.

92. (b); First paragraph of the passage says; "Africa simply needs to behave itself better, to allow market forces to operate without interference by corrupt rulers." So, (b) is the correct option.

93. (c); Refer to last lines of the passage which says; whereas societies in Asia perceived to have extensive corruption such as Bangladesh, Indonesia and Pakistan, enjoyed rapid economic growth. So, (c) is the correct option.

94. (a); Refer to the first paragraph of the passage which says; "During the past decade I witnessed how relatively well-governed countries in Africa." So, (a) is the correct option.

95. (e); Second paragraph of the passage says; "Africa is burdened with malaria like no other part of the world, simply because it is unlucky in providing the perfect conditions for that disease; high temperatures, plenty of breeding sites and particular species of malaria-transmitting mosquitoes that prefer to bite humans rather than cattle." Thus, (e) is the correct option.

96. (c); Backed means to give financial, material, or moral support to.Assert means to state a fact or belief confidently and forcefully.

97. (b); Insulate means to protect from heat, cold, noise or something by surrounding material.

98. (e); Discharging means to tell (someone) officially that they can or must leave, in particular:

99. (a); Proceedings means begin a course of action.

100. (d); Implement means to put (a decision, plan, agreement, etc. into effect.

101. (a); Option (a) is the correct choice. The phrase 'a fool's paradise' means a state of happiness based on a person's not knowing about or denying the existence of potential trouble.

102. (a); Option (a) is the right choice. The phrase 'feather in one's cap' means to have an achievement in your name.

103. (e); Option (e) is the correct choice. The phrase 'a fish out of water' means a person in a completely unsuitable environment or situation.

104. (d); Option (d) is the correct choice. The phrase 'foot in the door' means an action, appointment etc, that provides an initial step towards a desired goal.

105. (b); Option (b) is the right choice. The phrase 'bunch of fives' refers to boxing and how the five fingers come together for the same (a fist of punch).

106. (a); Change the order as – 'become almost'

107. (c); Remove 'at'

108. (c); It should be 'determine' in place of 'determining'.

109. (e); There is no error in the statement.

110. (d); Proper usage is –translated into action. So, replace 'towards' with 'into'.

111. (b);	**112. (a);**	**113. (b);**
114. (e);	**115. (b);**	**116. (a);**
117. (c);	**118. (d);**	**119. (a);**
120. (e);		

Mock 47

RBI Assistant Prelims 2017

REASONING ABILITY

Directions: Study the following information carefully and answer the questions given below.
In a certain code language 'notification of the Indian government' is written as 'doo see mo nee ti', government notification published' is written as 'see jo mo', 'published by authority' is written as 'jo pi ga', and 'notification of authority' is written as 'pi see ti'.

1. Which of the following represents the code for 'government notification by authority'?
(a) see ga pi mo (b) mo pi see nee
(c) ga pi mo ti (d) jo mo pi ga
(e) none of these

Directions (2-6): Study the following information to answer the given questions.
Twelve people are sitting in two parallel rows containing six people each, in such a way that there is an equal distance between adjacent persons. In row-1 P, Q, R, S, T and V are seated and all of them are facing South. In row-2 A, B, C, D, E and F are seated and all of them are facing North. Therefore, in the given seating arrangement each member seated in a row faces another member of the other row.
S sits third to right of Q. Either S or Q sits at an extreme end of the line. The one who faces Q sits second to right of E. Two people sit between B and F. Neither B nor F sits at an extreme end of the line. The immediate neighbour of B faces the person who sits third to left of P. R and T are immediate neighbours of each other. C sits second to the left of A. T does not face the immediate neighbour of D.

2. Who amongst the following sit at extreme ends of the rows ?
(a) S, D (b) Q, A (c) V, C
(d) P, D (e) Q, F

3. How many persons are seated between V and R?
(a) One (b) Two (c) Three
(d) Four (e) None

4. P is related to A in the same way as S is related to B based on the given arrangement. To which of the following is T related to, following the same pattern?
(a) C (b) D (c) E
(d) F (e) Cannot be determined

5. Which of the following is **true** regarding T ?
(a) F faces T
(b) V is an immediate neighbour of T
(c) F faces the one who is second to right of T
(d) T sits at one of the extreme ends of the line
(e) Q sits second to the right of T

6. Four of the following five are alike in a certain way based on the given arrangement and so form a group. Which is the one that **does not** belong to that group?
(a) A-T (b) B-T (c) F-P
(d) C-V (e) E – Q

Directions (7-11): Study the given information carefully and answer the given questions:
Seven Exams – U, V, W, X, Y, Z and F are to be held on seven consecutive days (starting on Sunday and ending on Saturday) not necessarily in the same order. Only one exam can be held on one day. Only two exams will be held after exam F. Only two exams will be held between exam Z and exam F. Only three exams will be held between exam V and exam Y. Exam V will not be held on Saturday. Exam U will be held before exam X and exam W. Exam W will be held after exam X (not necessarily immediately after).

7. Exam X will be held on which day?
(a) Monday (b) Tuesday (c) Thursday
(d) Wednesday (e) Saturday

8. Which exam will be held immediately after exam W?
(a) Exam Y (b) Exam Z (c) Exam V
(d) Exam F (e) None of these

9. Which exam will be held on Sunday?
(a) Exam Z (b) Exam V (c) Exam Y
(d) Exam X (e) Exam U

10. If all seven exams are held in the alphabetical order of their names starting on Sunday and ending on Saturday, the positions of how many will remain unchanged as compared to the original schedule?
(a) Three (b) More than three
(c) One (d) None (e) Two

11. If exam Z is related to Sunday in a certain way based on the given schedule. Similarly, If exam F is related to Wednesday. In the same way, exam V is related to which of the following days?
(a) Wednesday (b) Friday (c) Monday
(d) Saturday (e) Sunday

Directions (12-15): In these questions, relationship between different elements is shown in the statements. The statement is/are followed by two conclusions. Study the conclusions based on the given statements and Give answer-
(a) If only conclusion I is true.
(b) If only conclusion II is true.
(c) If neither conclusion I nor conclusion II is true.
(d) If either conclusion I or II is true.
(e) If both conclusions I and II are true.

12. Statements: $A < B \leq C = D, K \geq J > C$
Conclusions: I. $C < K$ **II.** $B \leq D$

13. Statements: $A < B \leq C = D, K \geq J > C$
Conclusions: I. $A \geq J$ **II.** $K > B$

14. Statement: $B \geq L > A \geq N < K$
Conclusions: I. $B > N$ **II.** $L < K$

15. Statement: $B \geq L > A \geq N < K$
Conclusions: I. $L > N$ **II.** $L = N$

Directions (16-20): Following questions are based on the five three-digit numbers given below
753 481 647 374 298

16. If all the digits in each of the numbers are arranged in descending order within the number, which of the following will form the lowest in the new arrangement of numbers?
(a) 753 (b) 481 (c) 647
(d) 298 (e) 374

17. If all the numbers are arranged in ascending order from left to right, which of the following will be the sum of all the three digits of the number which is exactly in the middle of the new arrangement.?
(a) 17 (b) 15 (c) 14
(d) 13 (e) 19

18. What will be the resultant of third digit of the lowest number is multiplied with the second digit of the highest number?
(a) 27 (b) 40 (c) 20
(d) 45 (e) 19

19. If the positions of the second and the third digits of each of the numbers are interchanged, how many even numbers will be formed?
(a) None (b) One (c) Two
(d) Three (e) Four

20. If two is added to the first digit of each of the numbers, how many numbers thus formed will be divisible by three?
(a) None (b) One (c) Two
(d) Three (e) Four

21. Raj leaves his home and goes straight 20 meters, then turns right and goes 10 meters. He turns left and goes 30 meters and finally turns right and starts walking. If he is moving in the north direction, then in which direction did he start his walking?
(a) East (b) West (c) North
(d) South (e) None of these

22. Village B is situated to the north of village A, village C is situated to the east of village B, village D is situated to the left of village A, in which direction is village D situated with respect to village C?
(a) West (b) South-East
(c) South (d) North-West
(e) None of these

23. Rohan said pointing towards a picture, "That picture is a sister of grandson of father of my maternal uncle". How is the lady in the picture related to Rohan?
(a) Father's sister
(b) Mother's sister
(c) Cousin (maternal brother)
(d) Cousin (maternal sister)
(e) None of the above

24. Priya points towards Pritam and says, "That person is the only son-in-law of my father". How is Priya related to Pritam?
(a) Aunt (b) Mother
(c) Grandmother (d) Wife
(e) None of the above

Directions (25-29): Study the following arrangement carefully and answer the questions given below:
(B 4 S T U V K 3 % F @ © L N 5 P 1 O $ E 2 D C 6 # 9 Z Q8) W ∗ M A

25. Which of the following is sixth to the left of the fifteenth from the left end of the given arrangement?
(a) 2 (b) #
(c) % (d) $
(e) Other than the given as option

26. How many such numbers are there in the given arrangement each of which is immediately preceded by a consonant but not immediately followed by a letter?
(a) One (b) None (c) Five
(d) Two (e) Four

27. How many such symbols are there in the arrangement, each of which is immediately followed by a letter but not immediately preceded by a number?
(a) One (b) Three (c) None
(d) Two (e) More than three

28. What should come in place of question mark (?) in the following series based on the above arrangement?
TV3 @L5 OED ?
(a) 69Q (b) #Z8
(c) 6#9 (d) #9Z
(e)Other than the given options

29. Four of the following five are alike in a certain way based on their positions in the given arrangement and so from a group. Which is the one that does not belong to that group?
(a) DC6 (b) @©L (c) 9ZQ
(d) 5P1 (e) #MW

30. How many such pairs of letters are there in the word "**ANIKET**" each of which has as many letters between them in the word as in English alphabet ?
(a) Four (b) One (c) Two
(d) More than four (e) None of these

31. In a row of children facing North, Rajan is twelfth from the right end and is fifth to the right of Satyarthi who is tenth from the left end. Total how many children are there in the row?
(a) 29 (b) 28 (c) 26
(d) 27 (e) None of these

32. Prem goes 10 km towards north, from there he goes 6 km towards south, then he goes 3 km towards east. Find out in which direction and how far is he from the starting point?
(a) 7 km, West (b) 7 km, East
(c) 5 km, West (d) 5 km, North-East
(e) None of these

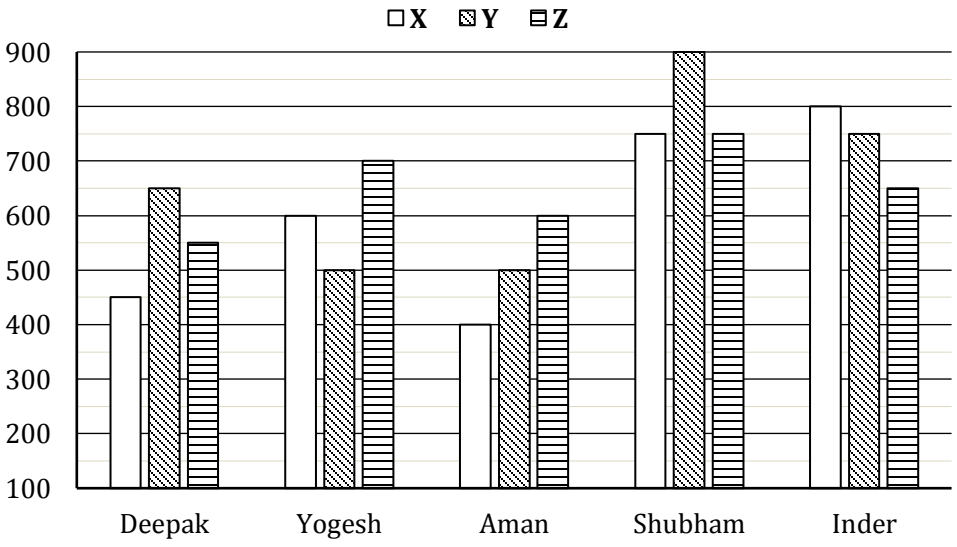
33. In a certain code language 'ANT' is written as '731' and 'SAW' is written as '574' and 'EAR' is written as '871'. How will ANSWER be written in that code language?
(a) 735841 (b) 753841
(c) 743861 (d) 735481
(e) Other than those given as options

34. If P means '–', N means '×', O means '÷ ' and M means '+' then
2 M 90 O 4 N 4 P 8 = ?
(a) 90 (b) 82 (c) 84
(d) 80 (e) 86

35. Read the following information carefully and answer the following questions.
'A + B' means 'A is sister of B'
'A × B' means 'A is mother of B'
'A – B' means 'A is brother of B'
'A ÷ B' means 'A is father of B'
What will come in place of question mark (?) if K is paternal grandmother of L?
K × H + U ? I + L
(a) + (b) × (c) –
(d) ÷ (e) Either (b) or (d)

QUANTITATIVE APTITUDE

Directions (36- 40): Given below, the bar graph shows number of three type of markers sold by five different sellers. Study the data carefully & answer the following questions.



36. Total markers sold by Deepak is what percent less than the total markers sold by Inder?
(a) 25% (b) $33\frac{1}{3}\%$ (c) 50%
(d) $66\frac{2}{3}\%$ (e) 75%

37. Find the ratio of 'Y' type marker sold by all the five sellers together to 'Z' type marker sold by all the five sellers together?
(a) 23 : 22 (b) 22 : 23 (c) 65 : 66
(d) 66 : 65 (e) 33 : 32

38. Average number of marker sold by Yogesh is how much more than average number of marker sold by Aman?
(a) 50 (b) 100 (c) 150
(d) 200 (e) 250

39. 'X' type marker sold by Yogesh, Shubham and Aman together is what percent less than 'Z' type marker sold by Yogesh, Shubham and Inder together?
(a) $33\frac{1}{3}\%$ (b) $26\frac{2}{3}\%$ (c) 25%
(d) 20% (e) $16\frac{2}{3}\%$

40. Total number of markers sold by Deepak, Yogesh and Aman together is how much more than total number of markers sold by Shubham and Inder?
(a) 150 (b) 250 (c) 350
(d) 450 (e) 550

Directions (41-45): What will come in place of the question mark (?) in the following number series?

41. 16, 20, 28, 44, ?
(a) 82 (b) 76 (c) 60
(d) 52 (e) 96

42. 2, 11, 36, 85, ?, 287
(a) 163 (b) 166 (c) 170
(d) 185 (e) 206

43. 8, 6, 14, 40, ?
(a) 151 (b) 148 (c) 80
(d) 162 (e) 98

44. 3, 83, 152, 208,249 , ?
(a) 280 (b) 320 (c) 265
(d) 351 (e) 273

45. 2, 14, 70, ?, 420
(a) 190 (b) 320 (c) 210
(d) 200 (e) 315

46. A, B and C started a business with Rs 60,000. Amount invested by 'A and C' together is twice than that of 'B' while amount invested by 'A' and 'B' together is thrice then that of 'C'. 'A' invested for 6 months, 'B' for 9 months and 'C' for a year. Find the share of 'B' out of total profit of Rs 3400.(in Rs.)
(a) 1200 (b) 1800 (c) 1000
(d) 1400 (e) 1500

47. The population of a village is 4500. If number of males increases by 15% and number of females increases by 25% then the population of village become 5325. Number of males is what percent of the Number of females in the village.
(a) 100% (b) 125% (c) 150%
(d) 175% (e) 200%

48. A spherical cannon ball of diameter 24 cm is melted and casted into two cylinders of equal size and shape having base radius 8 cm. Find the height of each cylinder?
(a) 36 cm (b) 18 cm (c) 32 cm
(d) 20 cm (e) 16 cm

49. A man can row 30 km upstream and 44 km downstream in 10 hours. It is also known that he can row 40 km upstream and 55 km downstream in 13 hours. Find the speed of the man in still water.
(a) 10 km/hr (b) 8 km/hr (c) 12 km/hr
(d) 14 km/hr (e) 16 km/hr

50. A mixture contains wine and water in the ratio 5 : 1. On adding 5 litre of water, the ratio of wine to water becomes 5 : 2. The quantity of wine in the mixture is ?
(a) 20 l (b) 22 l (c) 24 l
(d) 26 l (e) 25 l

51. 'X', 'Y' and 'Z' together can complete a work in one day. 'X' and 'Z' together can do same work as 'Y' alone do while 'Y' and 'Z' together can do five time as much work as 'X' do alone. Find the time taken by 'Z' to complete the work.
(a) 2 days (b) 3 days (c) 4 days
(d) 6 days (e) 1 days

52. Cost price of a bat and a ball is Rs. 75. Retailer sold bat at 40% profit and ball at 60% loss. Find the cost price of bat if in whole transaction he earns Rs. 20 as profit?
(a) Rs.60 (b) Rs.65 (c) Rs.55
(d) Rs.50 (e) Rs.45

53. Aman starts from point A at 2 : 00 pm and move towards point B at a speed of 25 km/hr while Sandeep leave point B at 4 : 00 pm and move towards point A at a speed of 35 km/hr speed. If distance between A and B is 410 km, then at what time Aman and Sandeep cross each other?
(a) 7: 00 p.m. (b) 8 : 00 p.m. (c) 9 : 00 p.m.
(d) 10 : 00 p.m. (e) 11 : 00 p.m.

54. Difference between CI and SI on a sum for 3 year at 20% p.a. is 176, Find the simple interest on the sum after 2 year at 10% p.a.?
(a) 225 (b) 250 (c) 275
(d) 300 (e) 350

55. How many 4 digits number can be formed using 2, 3, 5, 7, 6 and 9 if the number should be divisible by '4' and repetition is not allowed?
(a) 120 (b) 96 (c) 160
(d) 64 (e) 296

Directions (56-65): What should come in place of question mark (?) in the following questions?

56. $2652 - 441 + 928 - 6\frac{2}{3}\% \ of \ 3375 = ? + (31)^2$
(a) 1953 (b) 1853 (c) 1825
(d) 1935 (e) 1950

57. $(3080 + 6160) \div ? = 330$
(a) 27 (b) 25 (c) 28
(d) 24 (e) 23

58. $5\frac{15}{17}\% \ of \ 4913 - (15)^2 = (?)^2$
(a) 9 (b) 11 (c) 7
(d) 6 (e) 8

59. $? \times (523.5 + 687.5) = 24220.$
(a) 31 (b) 20 (c) 42
(d) 18 (e) 24

60. $(272 - 32) \times (124 + 176) \div (17 \times 15 - 15) = ? + 15 \times 16$
(a) 50 (b) 65 (c) 72
(d) 60 (e) 55

61. 125% of $92 - \sqrt[3]{4096} + ? = \sqrt{10201}$
(a) 5 (b) 2 (c) 4
(d) 3 (e) 9

62. $3\frac{1}{2} + 4\frac{3}{4} + 9\frac{3}{4} + 6\frac{7}{8} = ? + 5\frac{3}{4} \times \frac{1}{2} + 19$
(a) 13 (b) 9 (c) 16
(d) 3 (e) 2

63. $(1156)^{1/2} - (1728)^{1/3} + 178 - (?)^2 = \sqrt{2025} + 55$
(a) 100 (b) 12 (c) 144
(d) 15 (e) 10

64. $111 \times 36 - (61)^2 - (?)^2 = 3150 - (10)^2 - 3000.$
(a) 15 (b) 16 (c) 18
(d) 14 (e) 13

65. $(2744)^{1/3} + (17)^2 - 3 = ? - 79 \times 8$
(a) 930 (b) 938 (c) 918
(d) 994 (e) 932

66. The time taken by a boat to row 21 km with the stream is same as the time taken by it to row 12 km against the stream. If the speed of boat in still water is 5.5 kmph, find speed of stream ?
(a) 2 kmph (b) 4 kmph (c) 1.5 kmph
(d) 2.5 kmph (e) 3.5 kmph

67. A and B can complete a piece of work in 6 days, B and C in 8 days and A and C together can finish it in 12 days. If they work together and A leaves the work after 4 days, then how many days B and C will take to complete the remaining work ?
(a) 4 days (b) 5 days (c) 3 days
(d) 6 days (e) 2 days

68. A path of width 1.5 m is to be built around a rectangular park of length 12 m and breadth 9 m. Find the area of the rectangular path
(a) 72 m^2 (b) 60 m^2 (c) 75 m^2
(d) 80 m^2 (e) 65 m^2

69. Find the probability of selecting two face cards or two number cards from a pack of 52 cards?
(a) 61 : 77 (b) 121 : 212 (c) 60 : 121
(d) 116 : 221 (e) 125 : 221

70. If the population of city A increases by 10% and then decrease by 12% it becomes equal to $14\frac{2}{7}\%$ of city B's population. Find the population of city A initially, if B's population is 13,552?
(a) 2500 (b) 3000 (c) 2000
(d) 3200 (e) 2800

ENGLISH LANGUAGE

Directions (71-80): Read the following passage carefully and answer the questions given below it. Certain words have been printed in bold to help you locate them, while answering some of the questions.

Anyone who shops knows the cost of food is on the rise. Our grocery bills rise because the prices of key staple are on an upward trend that shows no sign of abating. When food suddenly costs more, those who can least afford it get hit hardest. On average, Canadians spend less than ten percent of their income on food. However, people living in poverty spend 50 percent and the poorest as much as 75 percent of their income on food. When prices mushroom, these people must do without, and it is women who most frequently eat last and least.The current global food situation is very serious and hence, we need to understand the reasons for such a dramatic increase in food prices in a short period.

It is argued that increases in energy costs are resulting in cost push inflation but the contribution of energy costs to overall costs in agriculture may not explain the huge increase in food prices.

Related to the current elevated energy prices, there has been a diversion of corn and edible oils to bio-fuels, which is significantly influenced by policy mandates. Very clearly this diversion to bio-fuels is a policy induced new reality, which coincided with price escalation in precisely those products and
hence, is noteworthy.
The financialization of commodity trade and current extraordinary conditions in global financial markets could have influenced the spurt in prices. The recent reductions in interest rates in the U.S. and the injection of liquidity have resulted in investors seeking new avenues such as commodity markets, in view of the turbulence in financial markets and the low returns in treasuries. The relatively easy liquidity and low interest rates, by themselves, make holding of inventories attractive and thus induce greater volatility in commodity markets. The weakening of the U.S. dollar is also advanced as a reason for the recent **volatility** in commodity markets, including food items. It is evident that this phenomenon is now also coinciding with the across the board rise in food prices.

In brief, while there are demand and supply side pressures on food items, there is considerable merit in the argument that the recent extraordinary increases in food prices are closely linked to public policy responses to high energy costs in advanced economies, and the turbulence in financial markets and financial institutions. It is said that the impact of such policy induced diversion of food to bio-fuels is significant at this juncture and reflects a preference to fill the fuel tanks of automobiles rather than fill the empty stomachs of people. Similarly, it is sometimes held that the weight accorded to financial stability in public policy may now be at the expense of stability in real sector – especially of sensitive commodities like food. At the same time, there is a general consensus that public policy in regard to food in many economies around the world has not provided adequate incentive to farmers to increase the supply of food and other agricultural products to comfortably match the growing demand over the medium term.

71. The passage lays emphasis on which of the following themes?
(A) The abysmally throwaway prices offered for food commodities.
(B) The worldwide acute shortage of food commodities.
(C) Promoting the use of bio-fuel for automobiles.
(a) A only (b) B only
(c) C only (d) All the three
(e) None of these

72. In what way are bio-fuels responsible for the increasing cost of food?
(A) It is a policy mandated to use bio-fuel in place of petroleum products especially in developing countries.
(B) Certain food commodities are being used for manufacturing alternative fuels.
(C) The low cost of bio-fuels has created fluctuation in prices of other agricultural commodities.
(a) A only (b) B only (c) C only
(d) A and B only (e) None of these

73. Which of the following situations has/have prompted investors to look towards commodity markets?
(A) Low interest rates in the U.S.
(B) Easy liquidity
(C) Volatility in commodity prices
(a) A and B only (b) B and C only
(c) A and C only (d) All the three
(e) None of these

74. Which of the following shows a cause-effect relationship between its two components?
(a) Reduction in interest rates and abundance of food commodities
(b) Reduction in energy prices and increase in food commodity prices.
(c) Turbulence in financial markets and escalation in production of food commodities.
(d) Dipping of U.S. dollar value and volatility in commodity markets
(e) Injection of liquidity and the drop-in investor confidence.

75. Which of the following can be inferred from the passage?
(A) At present the demand for food items exceeds the supply.
(B) Fuel production has been given higher priority than caring for the millions who are starving.
(C) Farmers have not been motivated to increase their production of food.
(a) A and B only (b) B and C only
(c) A and C only (d) None of these
(e) All A, B & C

76. Which of the following can be a remedy for the global situation mentioned in the passage?
(A) Reducing the production of cars and thereby the demand for energy.
(B) Inducing farmers to increase their food and other agricultural products.
(C) Increasing the prices of food items to compensate farmers for their losses.
(a) A only (b) A and B only
(c) B only (d) B and C only
(e) None of these

77. Which of the following statements is TRUE in the context of the passage?
(a) Commodity markets have become erratic due to easy liquidity and low interest rate.
(b) Governments of many countries have begun paying better prices for food commodities to ensure their farmers are taken care of.
(c) Farmers in developing countries have to compulsorily produce a certain quantity of bio-fuels annually.
(d) The financialization of commodity trade has resulted in a dip in prices of food products.
(e) The weakening of other currencies against the US dollar has resulted in high fuel prices.

78. Which of the following statements is FALSE in the context of the passage?
(A) Unusual conditions in global financial markets have aggravated the food price.
(B) The policy induced diversion of food to bio-fuels does not reflect that preference has been given to fueling vehicles and not to feeding the hungry.
(C) The weight accorded to financial stability in public policy will be at the cost of stability in the real sector.
(a) A and B only (b) B and C only (c) B only
(d) C only (e) None of these

79. Which of the following best explains the phrase this phenomenon as used in the fourth paragraph of the passage?
(a) Volatility in commodity markets which has led to hoarding
(b) Escalation in food prices caused by high interest rates
(c) Easy liquidity because of lack of investment in America
(d) Weakening of the US dollar and consequent variability in commodity markets
(e) Fluctuation in energy prices and outdated public policy

80. Choose the word which is **MOST OPPOSITE** in meaning to the word given in bold as used in the passage.
VOLATILITY
(a) agitation (b) effervescence
(c) optimism (d) disparity
(e) steady

Directions (81-84): In the following questions, a sentence has been given with some of its parts in bold. To make the sentence grammatically correct, you have to replace the bold part with the correct alternative given below. If the sentence is correct as it is, choose (e) as your answer (i.e. No correction required).

81. Military helicopters are old but have not **outlived their lives**.
(a) outliving their lives
(b) outlived their life
(c) outlived its life
(d) outliving its life
(e) No correction required

82. A discussion on 'Make in India' is **not complete without** taking stock of the workforce on the ground.
(a) incomplete unless.
(b) not completed until
(c) not completed from
(d) not complete if not
(e) No correction required

83. If some of the **state has best practice** it is good to learn from them.
(a) states has best practice
(b) state has best practice
(c) states have best practices
(d) states have best practice
(e) No correction required

84. Vishwanathan Anand and Sachin Tendulkar are icons who have helped us navigate from a **simple time to a more** complicated world.
(a) simpler time to a more.
(b) simple time to mere
(c) simpler time to many
(d) simple time to no
(e) No correction required

Directions (85-90): In the following passage, some of the words have been left out, each of which is indicated by a number. Find the suitable word from the options given against each number and fill up the blanks with appropriate words to make the paragraph meaningful.
There is a school of thought that some kinds of complex governance/policymaking functions should be insulated from the tumult of partisan politics by (**85**) them to technocrats. Giving in to the seductive appeal of this argument to the (**86**) of breaking the line of accountability of policymakers to the people altogether would undermine democracy and run the risk of these technocratic bodies being captured by (**87**) interests, instead of practising fidelity to professionalism. The proposal of the RBI's Urjit Patel committee to entrust monetary policy (**88**) to a committee of wise men in which even the RBI governor would have just one vote and can be overruled (**89**) to this school. This is a bad idea that (**90**) firmly be rejected.

85. (a) allocating (b) entrusting (c) imposing
(d) conferring (e) holding

86. (a) ambit (b) stretch (c) term
(d) extent (e) length

87. (a) vested (b) endowed (c) simple
(d) compound (e) any

88. (a) arranging (b) initiating (c) setting
(d) building (e) beginning

89. (a) concerned (b) agrees (c) associates
(d) correlates (e) belongs

90. (a) needs (b) must (c) had
(d) ought (e) requires

Directions (91- 95): Rearrange the following sentences (A), (B), (C), (D) and (E) in the proper sequence to form a meaningful paragraph; then answer the questions given below them.

A. The Liberal Democratic Party (LDP) and coalition partner Komeito have together secured a two-thirds majority in the lower house of the Diet, despite the shadow of scandal over Abe ahead of the election.
B. Abe's election promises precisely such redemption.
C. As the balance of power in the world at large, and in Asia-Pacific in particular, reconfigures, it is important that Japan, one of the world's most powerful nations, be released from hobbling constraints.
D. Japan's Prime Minister Shinzo Abe's gamble has paid off.
E. Japanese voters decided to choose security over Hope, a much-hyped new party that hoped to give Abe a run for his money.

91. Which of the following should be the **FIRST** sentence after rearrangement?
(a) B (b) D (c) A
(d) E (e) C

92. Which of the following should be the **THIRD** sentence after rearrangement?
(a) A (b) D (c) B
(d) E (e) C

93. Which of the following should be the **FOURTH** sentence after rearrangement?
(a) B (b) E (c) A
(d) C (e) D

94. Which of the following should be the **LAST** sentence after rearrangement?
(a) D (b) E (c) A
(d) B (e) C

95. Which of the following should be the **SECOND** sentence after rearrangement?
(a) C (b) A (c) B
(d) D (e) E

Directions (96-100): In each of the questions given below four words are given in bold which may or may not be correct. There can be a spelling or grammatical or contextual error. If all the words are correct then choose option (e) as the correct choice for the given question.

96. The **results** of (a)/ the **survey** (b)/ **have** been (c)/ very **encoraging**. (d)/ No error. (e)

97. It **mattered** (a)/ a great **deal** (b)/ to the **actress** (c)/ what other people **taught** of her. (d)/ No error. (e)

98. The young boy's **aggression** (a)/ is actually a **defence** (b)/ **mechanism** (c)/ against **rejection**. (d)/ No error. (e)

99. There are no easy **solutions** (a)/ to the **problems** (b)/ of **nuclear** (c)/ waste **desposal**. (d)/ No error. (e)

100. Why should any religious group feel **threatened** (a)/ by a **genuinly** secular State for it (b)/ remains the best bet for the **religiously** (c)/ inclined, whatever their **faith**. (d)/ No error (e).

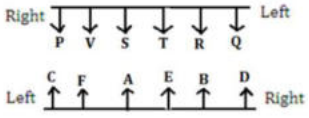
Solutions

REASONING ABILITY

1. (a);

Published	Jo
Authority	Pi
Notification	See
Government	Mo
By	Ga
Of	Ti
The/indian	Doo/nee

Direction (2-6):



2. (d); 3. (b); 4. (b);

5. (c); 6. (e);

Directions (7-11):

Days	Exams
SUNDAY	U
MONDAY	Z
TUESDAY	V
WEDNESDAY	X
THURSDAY	F
FRIDAY	W
SATURDAY	Y

7. (d); **8. (a);** **9. (e);**

10. (c); **11. (c);**

Directions (12-15):

12. (e); I. C < K (True) **II.** B ≤ D (True)

13. (b); I. A ≥ J (False) **II.** K > B (True)

14. (a); I. B > N (True) **II.** L < K (false)

15. (a); I. L > N (True) **II.** L = N (False)

Direction (16-20):

16. (e); 374

17. (d); (4+8+1)=13

18. (b); 8*5=40

19. (c); Two

20. (c); Two

21. (b); Raj started walking towards west.

22. (e); Village D is in south-west direction with respect to village C.

23. (d); Lady is cousin (maternal sister of Rohan)

24. (d); Priya is wife of Pritam.

Directions (25-29):

25. (c); L=6th
L=15th
L=9th

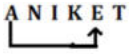
26. (d); B 4 S T U V K 3 % F @ © L N 5 P 1 O $ E 2 D C 6 # 9 Z Q 8 W * M A

27. (b); B 4 S T U V K 3 % F @ © L N 5 P 1 O $ E 2 D C 6 # 9 Z Q 8 W * M A

28. (b);

29. (e);

30. (b); There is only one pair.



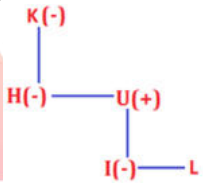
31. (c); Sathyarthi's position from left end = 10th
Sathyarthi's position from right end = 17th
Total number of children in the row
= 10 + 17 – 1 = 26

32. (d); After following given directions, Prem is 5 km and in north-east direction from the starting point.

33. (d);

34. (c); 2+90÷4×4-8=84

35. (d);



QUANTITATIVE APTITUDE

36. (a); Total markers sold by Deepak = 450 + 650 + 550 = 1650
Total markers sold by Inder = 800 + 750 + 650 = 2200
Required % = $\frac{2200-1650}{2200} \times 100 = \frac{550}{2200} \times 100$
= 25%

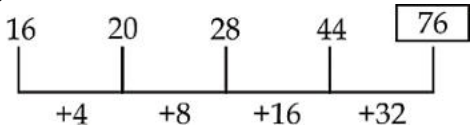
37. (d); 'Y' markers sold by all the fives sellers = 650 + 500 + 500 + 900 + 750 = 3300
'Z' marker sold by all the five sellers = 550 + 700 + 600 + 750 + 650 = 3250
Required ratio = $\frac{3300}{3250} = \frac{66}{65}$

38. (b); Average number of marker sold by Yogesh
= $\frac{600+500+700}{3} = 600$
Average number of marker sold by Aman
= $\frac{400+500+600}{3} = 500$
Required difference = 600 – 500 = 100

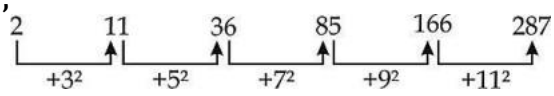
39. (e); 'X' type marker sold by Yogesh, Shubham and Aman together = 600 + 750 + 400 = 1750
'Z' type marker sold by Yogesh, Shubham and Inder together = 700 + 750 + 650 = 2100
Required % = $\frac{2100-1750}{2100} \times 100 = 16\frac{2}{3}\%$

40. (c); Required difference
= (450 + 650 + 550 + 600 + 500 + 700 + 400 + 500 + 600) – (750 + 900 + 750 + 800 + 750 + 650)
= 4950 – 4600 = 350

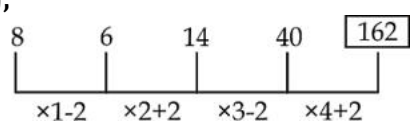
41. (b);



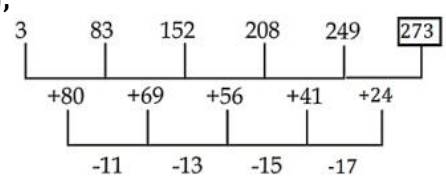
42. (b);



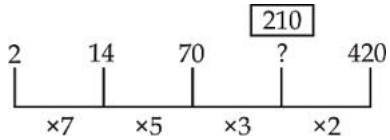
43. (d);



44. (e);



45. (c);



46. (a); Let, amounted invested by A, B and C is 'a', 'b' and 'c' respectively.

ATQ.

a + c = 2b ... (i)

a + b= 3c ... (ii)

on solving (i) & (ii) we get

4a = 5b & 3b = 4c ⇒ a : b : c

5 : 4 : 3

Ratio of profit

A	:	B	:	C
5×6	:	4×9	:	3×12
5	:	6	:	6

B's profit $= \frac{6}{17} \times 3400 = 1200$

47. (e); Let, Number of males in village = x

And, number of females in village = y

ATQ,

x + y = 4500 ... (i)

1.15x + 1.25y = 5325 ... (ii)

On solving (i) & (ii)

x = 3000, y = 1500

Required % $= \frac{3000}{1500} \times 100 = 200\%$

48. (b); Volume of spherical ball = Volume of 2 cylinder

$\frac{4}{3} \times \pi \times (12)^3 = 2 \times \pi \times 8^2 \times h \Rightarrow h = 18$ cm

49. (b); Let speed of man in still water be S_B km/hr and speed of stream be S_S km/hr

$\frac{30}{S_B - S_S} + \frac{44}{S_B + S_S} = 10$

$\frac{40}{S_B - S_S} + \frac{55}{(S_B + S_S)} = 13$

$Take\ \frac{1}{S_B - S_S} = a, \frac{1}{S_B + S_S} = b$

$30a + 44b = 10$ ... (i)

$40a + 55b = 13$ ... (ii)

On solving (i) and (ii)

$S_B = 8$ km/hr

50. (e); Let wine and water be $5x$ litre and x litre respectively

$Now, \frac{5x}{x+5} = \frac{5}{2} \Rightarrow 10x = 5x + 25 \Rightarrow x = 5$

$\Rightarrow$ 25 : 5 | 25 : 10

$Before\ mixture \mid After\ mixture$

Quantity of wine = 25ℓ

51. (b); Let 'X', 'Y' and 'Z' can complete a, b and c unit of work in one day.

ATQ,

a + c = b ... (i)

b + c = 5a ... (ii)

On solving (i) and (ii)

$a = \frac{b}{3} = \frac{c}{2}$

$\Rightarrow a : b : c$

1 : 3 : 2

(1 + 3+2) unit of work → 1 day

(6) unit of work → 1 day

$z\ alone = \frac{6}{2} day = 3\ days$

52. (b); Use mixture and allegation

If cost price of Bat = 75

$Profit\ on\ Bat = 75 \times \frac{40}{100} = 30$

If cost price of Ball = 75

$Loss\ on\ Ball = 75 \times \frac{60}{100} = -45$

Price of Bat : Price of Ball

30 -45

20

65 : 10

Cost price of Bat = 65

53. (d); Distance travelled by Aman in 2 hours = 25 × 2 = 50 km

Now, distance between Aman and Sandeep at 4 : 00 p.m.

= 410 – 50 = 360 km

Time to cross each other $= \frac{360}{35+25} = 6\ hour$

Required time = 4 : 00 + 6 hour = 10 : 00 p.m.

54. (c); Let sum = Rs. 250

C.I. for 3 year at 20% pa $= 250 \times \left(\frac{12}{10}\right)^3 - 250$

$= 182$

SI for 3 year at 20% pa $= \frac{250 \times 3 \times 20}{100} = 150$

Difference = 182 – 150 = 32 → 176

$\Rightarrow Sum = \frac{176}{32} \times 250 = 1375$

$Required\ Interest = \frac{1375 \times 2 \times 10}{100} = 275$

OR

Alternate method

Difference = $\frac{P\,r2}{100^2} \times \frac{(300+r)}{100}$

$176 = \frac{P \times 20^2}{100^2} \times \frac{(300+20)}{100}$

Therefore,

P = 1375

$Required\ Interest = \frac{1375 \times 2 \times 10}{100} = 275$

55. (b); The number which should be divisible by 4 will end with 32, 52, 72, 92, 36, 56, 76 and 96 (Total 8 ways)

Starting two numbers can be chosen in 4 × 3 = 12 ways

Total no. of ways = 12 × 8 = 96 ways

56. (a); $2652 - 441 + 928 - \frac{1}{15} \times 3375 = ? + 961$

$2652 - 441 + 928 - 225 - 961 = ?$

? = 1953

57. (c); $9240 \times \frac{1}{?} = 330 \Rightarrow ? = 28$

58. (e); $\frac{1}{17} \times 4913 - 225 = (?)^2$

$(?)^2 = 64 \Rightarrow ? = 8$

59. (b); $? \times 1211 = 24220 \Rightarrow ? = 20$

60. (d); $240 \times 300 \times \frac{1}{240} = ? + 240$

$? = 300 - 240 \Rightarrow ? = 60$

61. (b); $\frac{5}{4} \times 92 - 16 + ? = 101$

$99 + ? = 101 \Rightarrow ? = 2$

62. (d); $(3 + 4 + 9 + 6) + \left(\frac{1}{2} + \frac{3}{4} + \frac{3}{4} + \frac{7}{8}\right) = ? + \frac{23}{8} + 19$

$22 + \frac{23}{8} = ? + \frac{23}{8} + 19 \Rightarrow ? = 3$

63. (e); $34 - 12 + 178 - (?)^2 = 45 + 55$

$200 - 100 = (?)^2$

$(?)^2 = 100 \Rightarrow ? = 10$

64. (a); $3996 - 3721 - (?)^2 = 3150 - 100 - 3000$

$275 - (?)^2 = 50$

$(?)^2 = 225 \Rightarrow ? = 15$

65. (e); $14 + 289 - 3 = ? - 632 \Rightarrow ? = 932$

66. (c); Let Speed of stream be x kmph.

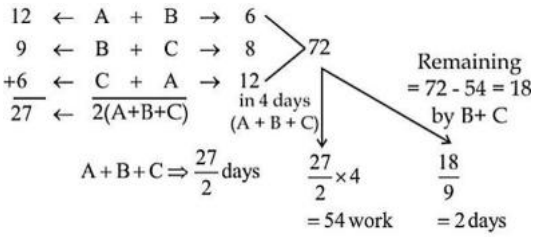
ATQ,

$\frac{21}{5.5+x} = \frac{12}{5.5-x}$

38.5 – 7x = 22 + 4x

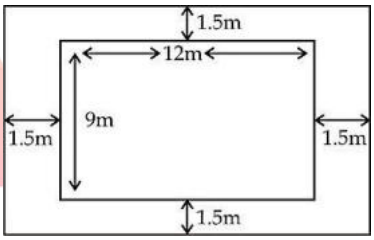
16.5 = 11x ⇒ x = 1.5 kmph

67. (e);



B and C will complete the remaining work in 2 days

68. (a);



Area of rectangular path = [15 × 12] – [12 × 9]

= 180 – 108 = 72 m^2

69. (d); Required probability = $\frac{^{12}C_2 + {}^{36}C_2}{^{52}C_2} = \frac{116}{221}$

70. (c); Let population of city A be x

$x \times \frac{110}{100} \times \frac{88}{100} = \frac{1}{7} \times 13552$

⇒ x = 2000

ENGLISH LANGUAGE

71. (b); The given passage revolves around drastic increase in food prices, thus resulting in inflation. Also, there has been a diversion of certain food commodities (corn and edible-oil) to bio-fuels, which has disturbed the demand and supply chain. There has been an acute shortage of food commodities because the farmers are not provided with adequate incentives to increase the supply of food and agricultural products. Therefore, we can say that the theme of the passage is 'the worldwide acute shortage of food commodities'.

72. (b); The third paragraph of the passage states that there has been a diversion of food (corn and edible oils) to bio-fuels which has resulted in huge increase in food prices.

73. (a); The fourth paragraph of the passage states that the recent reduction in interest rates in the U.S. and injection of liquidity have prompted investors to look towards commodity markets.

74. (d); According to the fourth paragraph of the passage, the weakening of U.S. dollar and volatility in commodity markets exhibit a cause-effect relationship.

75. (e); The given passage highlights that at present, the demand for food items is higher as compared to the supply of food items. Also, the preference has shifted from filling the empty stomach to filling the fuel tank of automobiles. Furthermore, farmers are not provided with adequate incentives to increase the supply of food and agricultural products. Therefore, options (A), (B) and (C) can be inferred from the passage.

76. (c); According to the passage, the current global situation is very serious and food prices are increasing drastically. To overcome the escalation in food prices, farmers should be motivated and provided with adequate incentives to increase the supply of food and agricultural products.

77. (a); According to the fourth paragraph of the passage, the relatively easy liquidity and reduction in interest rates have resulted in erratic behavior of commodity markets.

78. (c); In context of the passage, 'no government would prefer to fill the fuel tanks of automobiles rather than filling the stomach of the people' is false as per the last paragraph of the passage.

79. (d); 'This phenomenon' mentioned in the fourth paragraph of the passage refers to weakening of the U.S. dollar and subsequent fluctuation in commodity markets.

80. (e); 'Volatility' means tendency to change in a sudden way. 'Steady' is opposite in meaning to the given word.

81. (b); Replace 'outlived their lives' with 'outlived their life'.

82. (e); No correction required.

83. (c); Replace 'state has best practice' with 'states have best practices'

84. (a); Replace 'simple time to a more' with 'simpler time to a more'.

85. (b); **86. (d);** **87. (a);**

88. (c); **89. (e);** **90. (b);**

91. (b); The sequence after the rearrangement of sentences is **DAECB**.

92. (d); The sequence after the rearrangement of sentences is **DAECB**.

93. (d); The sequence after the rearrangement of sentences is **DAECB**.

94. (d); The sequence after the rearrangement of sentences is **DAECB**.

95. (b); The sequence after the rearrangement of sentences is **DAECB**.

96. (d); 'encouraging' is the correct spelling.

97. (d); 'thought' will be used in place of 'taught'.

98. (b); 'defensive' is the correct use instead of 'defence' as 'defence' is a noun which means protection and 'defensive' is an adjective which means protective. Moreover, 'mechanism' is a noun whose quality will be determined by an adjective.

99. (d); 'disposal' will be the correct spelling.

100. (b); 'Genuinely' will be the correct spelling,

Mock 48

RBI Assistant Prelims 2016

REASONING ABILITY

Direction (1–5): Study the following information carefully and answer the given questions:
M, N, O, P, Q, R, S, T and U are sitting around a circular table facing the center. N is fourth to the left of S, who is second to the right of O. R is fourth to the right of O and is second to the left of U. P is not an immediate neighbor of either U or N. M is not neighbor of R. T is third to the right of Q.

1. Who among the following is second to the right of U?
(a) O (b) Q (c) T
(d) R (e) None of these

2. Who is sitting third to the right of the one who is sitting second to the right of M?
(a) P (b) O (c) U
(d) T (e) None of these

3. How many persons are sitting between T and P, if counted anti clock-wise from P?
(a) One (b) Two (c) Three
(d) Four (e) None of these

4. What is the position of M with respect to T?
(a) Second to the right
(b) Third to the left
(c) Second to the left
(d) Fifth to the right
(e) None of these

5. Who sits third to the left of Q?
(a) M (b) S (c) T
(d) O (e) None of these.

Directions (6-10): In each question below are three statements followed by two conclusions numbered I and II. You have to take the three given statements to be true even if they seem to be at variance from commonly known facts and then decide which of the given conclusions logically follows from the three statements disregarding commonly known facts. Give answer
(a) If only conclusions I follows.
(b) If only conclusions II follows.
(c) If either I or II follows.
(d) If neither I nor II follows.
(e) If both I and II follow.

6. **Statements:** All cocacola are mirinda.
All mirinda are fanta.
Some fanta are dew.
Conclusions: **I.** All cocacola are fanta.
II. Some dews are cocacola.

7. **Statements:** Some honda are ford.
All ford are fiat.
Some fiat are bmw.
Conclusions: **I.** Some ford are bmw.
II. Some fiat are honda.

8. **Statements:** Some apache are pulser.
Some pulser are yamaha.
Some yamaha are duke.
Conclusions: **I.** some apache are yamaha.
II. Some pulser are duke.

9. **Statements:** Some wallets are bags.
Some bags are leather.
All purses are leather.
Conclusions: **I.** some purse are bags.
II. Some purse are wallet.

10. **Statements:** All windows are operating.
All dos are operating.
Some operating are processing.
Conclusions: **I.** Some processing are windows.
II. No processing are window.

Directions (11-15): Study the given information carefully and answer the given questions:
Seven plays – A, B, C, D, E, F and G are to be held on seven consecutive days (starting on Monday and ending on Sunday) not necessarily in the same order. Only one play can be held on one day. Only two plays will be held after play G. Only two plays will be held between play F and play G. Only three plays will be held between play B and play E. Play B will not be held on Sunday. Play A will be held before play D and play C. Play C will be held after play D (not necessarily immediately after).

11. Play D will be held on which day?
(a) Monday (b) Tuesday (c) Wednesday
(d) Thursday (e) Saturday

12. Which play will be held immediately after play C?
(a) Play E (b) Play F (c) Play B
(d) Play G (e) None of these

13. Which play will be held on Monday?
(a) Play F (b) Play B (c) Play E
(d) Play D (e) Play A

14. If all seven plays are held in the alphabetical order of their names starting on Monday and ending on Sunday, the positions of how many will remain unchanged as compared to the original schedule?
(a) Three (b) More than three (c) One
(d) None (e) Two

15. If Play F is related to Monday in a certain way based on the given schedule. Similarly, If play G is related to Thursday. In the same way, play B is related to which of the following days?
(a) Wednesday (b) Friday
(c) Tuesday (d) Saturday
(e) Sunday

Directions (16-20): Answer the following questions referring to the symbol-letter-number sequence given below:
X N 5 C Z 2 $ P ✸ A B 1 Q 3 Y N O 9 L 6 M 4 ~ F 7 I

16. Which of the following is exactly midway between the tenth element from the right and fifth element from the left end?
(a) A (b) B (c) 1
(d) ✸ (e) None of these

17. How many letters are there in the above sequence which are immediately preceded by a number and immediately followed by a consonant?
(a) None (b) one (c) Two
(d) Three (e) None of these

18. What should come in place of the question mark (?) in the following sequence?
?, 2AC, ✸Q$, 1NA
(a) 5$X (b) CPN (c) ZP5
(d) 5$Q (e) None of these

19. Which of the following is the eleventh element to the right of the second element from the left end in the above sequence?
(a) 9 (b) 1 (c) M
(d) 4 (e) None of these

20. If both the halves of the above sequence are written in reverse order, which will be the sixth element to the right of the sixteenth element from the right end?
(a) 4 (b) ~ (c) O
(d) N (e) None of these

Directions(21-25): Study the following information to answer the given questions

21. Statements: A≤B≥C=D≤E
Conclusions: **I.** A<B **II.** E≥B
(a) Only I is true (b) Only II is true
(c) Either I or II true (d) Neither I nor II true
(e) Both I and II are true

22. Statement: P = S, P < Q, R ≤ Q, R ≤ T
Conclusions: **I.** Q > S **II.** Q = T
(a) Only I is true (b) Only II is true
(c) Either I or II true (d) Neither I nor II true
(e) Both I and II are true

23. Statements: G≥F>A=C<D, A=B≥E<H
Conclusions: I.A≤G II.D>E
(a) Only I is true
(b) Only II is true
(c) If either I or II follow
(d) If neither I or II follow
(e) If both I and II follow

24. What should be placed in place of question mark in equation B ≤ A ? N ? K ? S to make A > S always true.
(a) =, >, ≥ (b) =, <, ≥ (c) =, >,<
(d) =, >, ≤ (e) None of these

25. Statements: P > Q ≥ R, T = R ≤ A, A ≥ B
Conclusions: I. B < P II. P ≤ B
(a) only I follows (b) only II follows
(c) either I or II (d) neither I nor II
(e) both I and II

Directions (26-30): Study the following information carefully and answer the questions given below:
Seven persons, A, E, I, O, U, B and C are sitting in a straight line facing north (but not necessarily in the same order.) U sits third from the right end. E sits third to the right of C, who is not an immediate neighbor of I or A, who sits third to the left of O, who is an immediate neighbour of C. U sits between O and E, who sits on the immediate left of I. Neither E nor B sits at any end of the line. There is only one person sit between I and U but that person is neither C nor B.

26. Who among the following is second to the left of O?
(a) E
(b) I
(c) B
(d) Other than those given as options
(e) A

27. Who among the following sit at the ends of the rows?
(a) C and O (b) I and E
(c) A and O (d) Can't be determined
(e) Other than those given as options

28. Who among the following sits third to the left of E?
(a) I (b) C (c) A
(d) Can't be determined
(e) Other than those given as options

29. What is the position of I with respect to C?
(a) Second to the left (b) Third to the left
(c) Fourth to the right (d) Fifth to the right
(e) Other than those given as options

30. Which of the following statements is true?
(a) I sits on the immediate left of A
(b) The person who sits exactly between I and U is C.
(c) The person who sits exactly between C and A is B.
(d) Only (b) and (c) are true
(e) None is true

31. How many such pairs of letters are there in the word INTEREST each of which has as many letters between them in the word as in the English alphabetical series?
(a)None (b)One (c)Two
(d)Three (e)More than three

32. How many meaningful English words can be formed with the letters ABTI using all the letters, and each letter only once in each word?
(a) One (b) Two (c) Three
(d) None (e) None of these

Directions (33-34): Study the following information carefully and answer the given question:
There are six letter O,R,U,D,N and A which are arranged in a particular manner such that A is placed fourth to the left of N. O is not placed immediately next to either A or N. Both letters R and U are placed immediately next to O. D is not at the left end of the row.

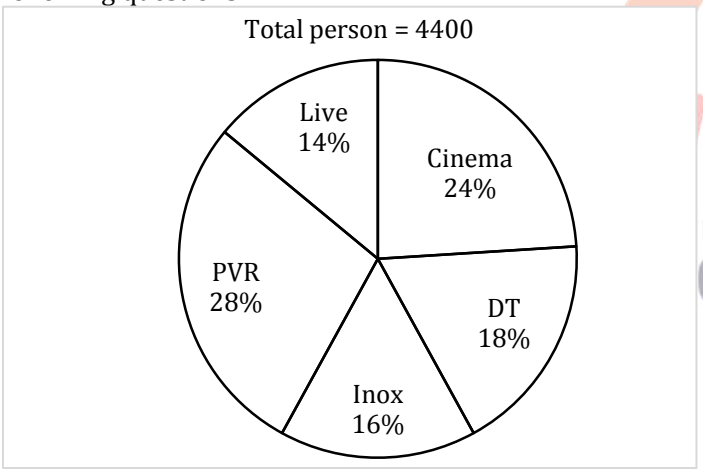
33. Which of the following pairs sits at the extreme ends of the row?
(a) OD (b) AD (c)NA
(d)DN (e) None of these

34. Which of the following meaningful words will be formed after arrangement?
(a)DAROUN (b)ARDOUN (c)AROUND
(d)ARUNOD (e) None of these

35. In a row of 25 persons, Ronaldo is twelfth from the right. If there are five persons between Ronaldo and Rivaldo, who is on the right side of Ronaldo, what is the position of Rivaldo from the left?
(a) 21 (b) 19 (c) 20
(d) 18 (e) None of these

QUANTITATIVE APTITUDE

Directions (36-40): Pie-chart given below shows number of persons come to watch movies in five different theaters. Study the data carefully and answer the following questions.



36. If Ratio of male and female come in PVR theatre to watch movies is 4 : 7. Then find the difference between number of male to number of female come in PVR theatre to watch movie.
(a) 448 (b) 784 (c) 224
(d) 336 (e) 360

37. 'Cinema' theatre shows three movies. 25% of person watch Padmavat, $\frac{100}{3}$% of person watch padman and remaining watch 'College Diaries'. Find the average number of person who watch Padmavat and College Diaries.
(a) 340 (b) 352 (c) 368
(d) 374 (e) 382

38. $\frac{50}{3}$% of the person came in DT cinema bought popcorn. $\frac{200}{3}$% of the person bought pepsi and remaining person bought both the items. Find the total number of person who bought atmost one item?
(a) 726 (b) 583 (c) 440
(d) 550 (e) 660

39. Find the difference between the person who visit Cinema and DT theatre together to the person who visit LIVE & INOX theatre together?
(a) 462 (b) 484 (c) 506
(d) 352 (e) 528

40. Person come to DT theatre is what percent of the person who come to Cinema theatre?
(a) 50% (b) $\frac{200}{3}$% (c) 75%
(d) $\frac{250}{3}$% (e) $\frac{400}{3}$%

Directions (41-45): What will come in the place of the question mark (?) in the following number series?

41. 18, 55, 167, 504, ?, 4553
(a) 1216 (b) 1516 (c) 1520
(d) 1816 (e) 1220

42. 279, 294, 324, 369, 429, ?
(a) 504 (b) 520 (c) 564
(d) 604 (e) 524

43. 10, 26, 50, 110, 320, ?
(a) 825 (b) 1245 (c) 1065
(d) 1265 (e) 1625

44. 286, 142, ?, 34, 16, 7
(a) 54 (b) 70 (c) 60
(d) 64 (e) 50

45. 200, 320, 464, 613, 786, 964 , ?
(a) 1284 (b) 1066 (c) 1166
(d) 1612 (e) 1264

Directions (46-55): What should come in place of question mark (?) in the following questions?

46. $\frac{187}{357} \times (42)^2 - 220\%\ of\ 380 = 25\%\ of\ ?$
(a) 330 (b) 358 (c) 342
(d) 352 (e) 362

47. $44 \times 46 - 160\%$ of $950 = \sqrt{441} \times ?$
(a) 14 (b) 24 (c) 18
(d) 28 (e) 26

48. $2744 - 1418 + 1756 - 1956 = ? + 986$
(a) 110 (b) 120 (c) 140
(d) 150 (e) 180

49. 77% of 150 + 37.5% of 260 = ?% of 284
(a) 75 (b) 65 (c) 55
(d) 45 (e) 85

50. $7\frac{1}{6} + 9\frac{2}{3} - 4\frac{1}{2} = ? - 5\frac{5}{6} + 6\frac{1}{2} + 3\frac{1}{6}$
(a) 8 (b) $8\frac{1}{2}$ (c) $8\frac{1}{3}$
(d) $8\frac{3}{4}$ (e) $8\frac{2}{3}$

51. $2^5 \times 2^7 \div 4^3 \times 8^4 \div 16^3 = 2^?$
(a) 5 (b) 4 (c) 8
(d) 6 (e) 9

52. $\sqrt{576} \times \sqrt{6561} = ? \times \sqrt{11664}$
(a) 15 (b) 18 (c) 21
(d) 24 (e) 28

53. $\frac{306}{69} \times \frac{483}{34} \div \frac{63}{25} = ?^2$
(a) 25 (b) 21 (c) 6
(d) 5 (e) 7

54. $0.4 \times 220 \div 48 \times 18 = ? \times (1331)^{\frac{1}{3}}$
(a) 3 (b) 6 (c) 9
(d) 2 (e) 4

55. 22.5% of 120 + 47.5% of 360 = ? × 11
(a) 19 (b) 14 (c) 15
(d) 16 (e) 18

56. Difference between 40% of y and 20% of x is 270 whereas difference between 40% of x and 20% of y is zero. Find the sum of 'x' and 'y' ?
(a) 1250 (b)1400 (c) 1200
(d) 1350 (e)1500

57. Speed of Satish is 40% of speed of Aman. Aman covers 2340 m in 18 seconds. Find in how much time Satish can cover 468 m.
(a) 8 seconds (b) 9 seconds (c)10 seconds
(d) 11 seconds (e) 12 seconds

58. A retailer buys article A and markup it 20 % above its cost price. At the time of sale if he gave 10% discount instead of 20% and he gets Rs. 4.8 more. Find the cost price of the article A.
(a) 100 (b) 80 (c) 60
(d) 40 (e) 50

59. A boatman can cover a river of 60 km length and came back at its initial point in 4.5 hrs. If speed of boat is thrice than that of the speed of stream then find the speed (in kmph) of boat?
(a) 10 (b) 30 (c) 20
(d) 60 (e) 25

60. Area of a given circle is 616 m^2. Perimeter of a rectangle is same as perimeter of circle. Find the diagonal (in m) of the rectangle if length of rectangle is 20% more than the breadth of the rectangle.
(a) $2\sqrt{59}$ (b) $2\sqrt{62}$ (c) $4\sqrt{61}$
(d) $4\sqrt{15}$ (e) $2\sqrt{65}$

61. A man can row 15 kmph in still water and it takes him 75 minutes to row to a place and back if the speed of current is 3 Kmph, then how far is the place?
(a) 9 km (b) 6 km (c) 12 km
(d) 15 km (e) 13.5 km

62. There are 5 multiple choice questions in an examination. How many sequences of answers are possible, if the first three questions have 4 choices each and the next two have 6 choices each?
(a) 2804 (b) 3456 (c) 7776
(d) 2304 (e) 1024

63. A bag has seven red, four white and three green balls while another bag has five red, six yellow and three blue balls. A bag is selected at random and a ball drawn out of it, then Find the probability that the ball drawn is red.
(a) $\frac{1}{7}$ (b) $\frac{3}{7}$ (c) $\frac{2}{7}$
(d) 1 (e) $\frac{6}{7}$

64. Veer's grandfather was 11 times older to him 6 years ago and he will be 3 times of veer's age 18 years from now. Six years hence form now, what will be the ratio of Veer's age to that of his grandfather?
(a) 5 : 11 (b) 11 : 5 (c) 4 : 15
(d) 13 : 3 (e) 3 : 13

65. What will be the cost of fencing the rectangular field whose area is 486 sq. m. if the cost of fencing is Rs 11 per meter and length of the field is 50% more than the breadth of the field.
(a) Rs 1100 (b) Rs 990 (c) Rs 880
(d) Rs 770 (e) Rs. 660

66. Average of three numbers is 44. If ratio of smallest number to largest number is 8 : 15 while the sum of smallest and second smallest number is 72, find the difference between second smallest number and smallest number ?
(a) 2 (b) 4 (c) 6
(d) 8 (e) 10

67. A mixture of 25 ℓ contains milk and water in the ratio 3 : 2. 'x' ℓ of water is added in mixture to make the ratio of milk and water as 1 : 1. After that 'y' ℓ of milk is added to make the proportion of milk and water same as in initial condition. Find 'y' is what percent more than 'x'?
(a) 12.5% (b) 25% (c) 37.5%
(d) 50% (e) 62.5%

68. Ratio of upstream speed to downstream speed is 1 : 11. If speed of boat is 30 km/hr. Find the distance covered in upstream in 5 hours ? (in km)
(a) 66 (b) 55 (c) 25
(d) 30 (e) 40

69. Five year hence, average age of A, B and C is 27. Six years ago ratio of age of A and B is 6 : 7. B is 8 years younger than C. then, find the difference between C's age and A's age ?
(a) 14 (b) 12 (c) 10
(d) 8 (e) 6

70. A retailer sold bat at 25% profit. Cost price of 5 bats is equal to cost price of 4 balls. On ball retailer earns 40% profit. If on selling one bat and one ball he earns Rs. 45 profit then find the cost price of one ball.
(a) Rs. 40 (b) Rs. 50 (c) Rs.90
(d) Rs.60 (e) Rs. 75

ENGLISH LANGUAGE

Direction (71-80): Read the following passage carefully and answer the given below it. Certain words/phrases have been printed in **bold** to help you locate them while answering some of the questions.

Long ago, a Brahmin called Haridatta lived in a little village. He was a farmer but the piece of land he cultivated provided him with so little to survive on that he was very poor.

One day, unable to stand in the heat of the summer Sun, he went to rest for a while under a big tree on his land. Before he could **stretch out** on the ground, he saw a huge black cobra slithering out of an anthill nearby. The snake then spread his hood and swayed gracefully from side to side. Haridatta was **astonished** to see this and he thought, "This cobra must really be the god of this land. I have never seen or worshiped him before, which is probably why I am not able to get anything from the land. From this day onwards, I will worship him." He hurried back to his home at once and returned with a glass full of milk. He poured it into a bowl and turning to the anthill said, "O ruler of the land, I did not know you were living in this anthill. That is why I have not paid my tribute to you. Please accept my apologies for this omission and accept this **humble** offering." He then placed the bowl of milk at the entrance of the anthill and left the place.

The next day when the Brahmin arrived to work on his land before the Sun rose, he found a gold coin in the bowl he had left at the anthill. He was very happy indeed and from that day on, he made it a practice to offer the cobra milk in a bowl each day. The next morning he would collect a gold coin and leave.

One day Haridatta had to go to a neighbouring village on business. He asked his son to go to the anthill as usual and leave a bowl of milk for the cobra. The son did as he was told, but when he went to the same spot the next day and collected the gold coin he thought, "This anthill must be full of gold. If I kill the cobra, I can collect all the gold **in an instant,** instead of having to waste my time coming here everyday". He then struck the cobra with a big stick. The cobra **deftly** dodged the blow but bit Haridatta's son with liis poisonous fangs. The boy soon died. When Haridatta returned to his village the next day, he heard how his son had met his death. He realized at once that his son's greed would probably have caused him to attack the cobra.

The Brahmin went to the anthill the day after his son's cremation and offered milk to the cobra as usual. This time, the cobra did not even come out of his hole. Instead he called out to Haridatta, "You have come here for gold, forgetting that you have just lost a precious son and that you are in mourning. The reason for this is pure greed. From today, there is no meaning to our relationship. I am going to give you a diamond as a final gift. But please don't ever come back again." He slithered away as the Brahmin watched.

71. Which of the following is true according to the story?
(a) Haridatta had asked his son to give milk to the cobra because he himself was tired of doing it
(b) The cobra gave Haridatta a diamond everyday
(c) Haridatta's son was greedy .
(d) Haridatta had no idea as to why the cobra had killed his son
(e) All are true

72. What was the cobra's final gift to the Brahmin?
(a) Venom (b) A diamond (c) A bite
(d) A gold coin (e) None of these

73. What did Haridatta think on seeing the cobra for the first time?
(a) The cobra was divine and he would get gold coins from it if worshipped
(b) The cobra was the god of his land and had to be worshipped
(c) He was fearful of the cobra and ran away from the spot
(d) The cobra was responsible for his poverty
(e) None of the above

74. Which of the following is possibly the most appropriate title for the story?
(a) The Cobra and The Brahmin
(b) The Foolish Brahmin
(c) The Brave Cobra
(d) Haridatta and His Son
(e) The Mourning Father

75. Why did Haridatta's son try to kill the cobra?
(a) The cobra had angered him through his behaviour
(b) The cobra was known to be poisonous and had killed several men in the village by biting them
(c) He believed that the anthill in which the cobra lived contained all the gold coins
(d) He thought the cobra would bite him if he went near it
(e) He did not like the fact that his father was wasting his time by feeding the cobra milk everyday

Direction (76-78) : Choose the word/group of words which is most similar in meaning to the word/ group of words printed in bold as used/ in the passage.

76. Humble
(a) Rich (b) Waste (c) Meek
(d) Poor (e) Low

77. Astonished
(a) Petrified (b) Upset (c) Dazed
(d) Fearful (e) Surprised

78. Stretch out
(a) Lie-down (b) Exercise (c) Fall
(d) Elongate (e) Extend out

Direction (79-80): Choose the word/group of words which is most opposite in meaning to the word/ group of words printed in bold as used in the passage.

79. Deftly
(a) Nimbly (b) Artistically (c) Skillfully
(d) Shallowly (e) Sluggishly

80. In an instant
(a) In lieu of (b) Quickly (c) At once
(d) One each day (e) Speedily

Directions (81-85) : These sentences have two blanks, each blank indicating that something has been omitted. Choose the set of words for the blanks which best fits the meaning of the sentence, as a whole.

81. After carefully ……. the situation, the farmer sympathized ……. the mule.
(a) scrutinizing, on (b) assessing, with
(c) observing, through (d) fighting, by
(e) ignoring, for

82. Once there lived a cunning fox who always ……. to ……. others with his awful acts.
(a) wished, cheating (b) desired, betrayed
(c) thought, fooling (d) tried, deceive
(e) longed, beaten

83. I ……. a friend named Raj who ……. a horse ranch the city.
(a) has, buys (b) need, holds
(c) possess, runs (d) have, owns
(e) got, sells

84. The recently……Olympic games experienced some unhealthy practices……..to by a few athletes.
(a) concluded, resorted (b) finished, preferred
(c) held, exhibited (d) over, adhered
(e) closed, devoured

85. If criminals are……..to join electoral fray,……..is likely to increase.
(a) compelled, brotherhood
(b) encouraged, harmony
(c) allowed, extortion
(d) deterred, corruption
(e) invited, voting

Direction (86-90): Rearrange the given six sentences A, B, C, D, E and F in a proper sequence so as to form a meaningful paragraph and then answer the given questions.

A. He did whatever work was assigned to him and soon the lion became so fond of him that he promised to give him a cart full of almonds as pension when he (the squirrel) retired.
B. Once a squirrel joined the service of the King of the forest: the Lion.
C. The squirrel had waited so long for this day but when he saw the almonds, he was seized with sadness as he realized that they were of no use to him now when he had lost all his teeth.
D. However, he envied other squirrels in the forest because of their carefree life which he could not enjoy as he had to be by the King's side all the time.

E. He consoled himself with the thought that at the end of his career, he would receive a cart full of almonds, a food that only a few squirrels got to taste in their lifetime.

F. Finally the day came when it was time for him to retire and as promised the King gave a grand banquet in his honour and presented him with a cart full of almonds.

86. Which of the following should be the SECOND sentence after the rearrangement?
(a) A (b) B (c) F
(d) D (e) E

87. Which of the following should be the FIRST sentence after the rearrangement?
(a) A (b) C (c) B
(d) D (e) E

88. Which of the following should be the FIFTH sentence after the rearrangement?
(a) E (b) D (c) B
(d) F (e) A

89. Which of the following should be the FOURTH sentence after the rearrangement?
(a) A (b) B (c) C
(d) F (e) E

90. Which of the following should be the SIXTH (LAST) sentence after the rearrangement?
(a) C (b) D (c) A
(d) B (e) E

Directions (91-100): Read each sentence to find out whether there is any grammatical or idiomatic error in it. The error, if any, will be in one part of the sentence. The number of that part is the answer. If there is 'No error', the answer is (e). (Ignore errors of punctuation, if any.)

91. Mahesh who was (a)/ junior in most (b)/ other employees in his office (c)/ has been promoted.(d)/ No error. (e)

92. From the last one month (a)/ each of us (b)/ has been working (c)/ on the same project. (d)/ No error. (e)

93. When I receive (a)/ the letter, the date (b)/ for the interview (c)/ was already over. (d)/ No error. (e)

94. We had (a)/ helped him (b)/ if he had (c)/ requested us earlier. (d)/ No error. (e)

95. We have observed that (a)/ many good programmes (b)/ suffer of shortage (c)/ of funds and other resources. (d)/ No error. (e)

96. Jagdish met me yesterday (a)/ but he did not tell me (b)/ that he has (c)/ resigned from the factory. (d)/ No error. (e)

97. It is unfortunate (a)/ but still a reality (b)/ that poverty and development (c)/ goes hand in hand (d)/ No error. (e)

98. I know who (a)/ this job should be (b)/ entrusted to (c)/ for smooth handing. (d)/ No error. (e)

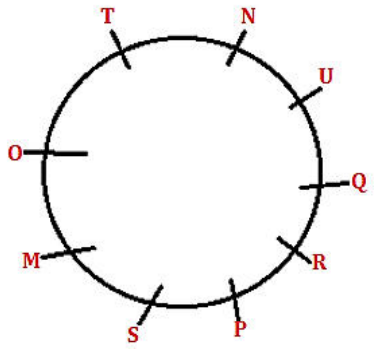
99. The Supervisor noticed that (a)/ one of the employees were (b)/ involved in (c)/ unfair activities outside the office. (d)/ No error. (e)

100. How well a person (a)/ completes his own (b)/ assignments depend (c)/ upon his skill (d)/ No error. (e)

Solutions

REASONING ABILITY

Direction (1-5):

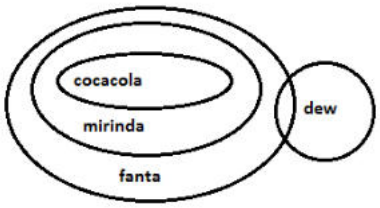


1. (c); 2. (c); 3. (d);

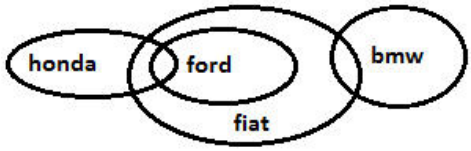
4. (a); 5. (b);

Direction (6-10):

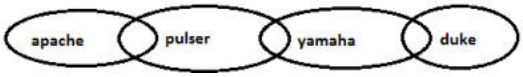
6. (a);



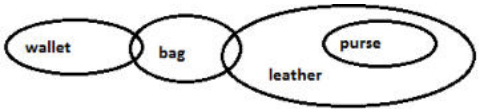
7. (b);



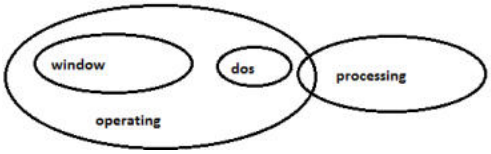
8. (d);



9. (d);



10. (c);



Directions (11 - 15):

Days	Plays
Mon	A
Tue	F
Wed	B
Thu	D
Fri	G
Sat	C
Sun	E

11. (d); **12. (a);** **13. (e);**

14. (e); **15. (c);**

Directions (16 - 20):

16. (b);

17. (c); 5CZ ,3YN

18. (a); 5$X

19. (e); R=11th

L=2nd

L=13th => Q

20. (b);

Directions (21 - 25):

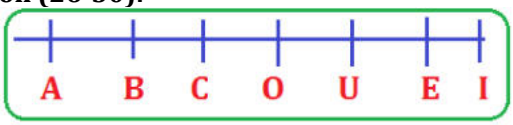
21. (d); **22. (a);**

23. (b); G≥F>A=C=B≥E<H<D

24. (a); B ≤ A = N > K ≥ S

25. (c);

Direction (26-30):



26. (c); **27. (e);** **28. (b);**

29. (c); **30. (c);**

31. (e);

32. (a); ABTI→BAIT

Direction (33-34):

33. (b); A R O U N D or A U O R N D

34. (c); Meaningful word is AROUND

35. (c); here Ronaldo is 12th from the right , i.e. 14th from the left. therefore, the position of Rivaldo is 14+5+1=20th from the left.

QUANTITATIVE APTITUDE

36. (d); Total person came to PVR theatre

$= \frac{28}{100} \times 4400 = 1232$

$Required\ value = \frac{(7-4)}{11} \times 1232 = 336$

37. (b); Total person come in Cinema theatre

$= \frac{24}{100} \times 4400 = 1056$

$Required\ value$

$= \frac{1}{2} \times \frac{\left[25+\left(100-25-\frac{100}{3}\right)\right]}{100} \times 1056$

$= \frac{1}{200} \times \frac{200}{3} \times 1056 = 352$

38. (e); Total person come in DT theatre

$= \frac{18}{100} \times 4400 = 792$

$Required\ value = \left[\frac{50}{3} + \frac{200}{3}\right] \times \frac{792}{100} = 660$

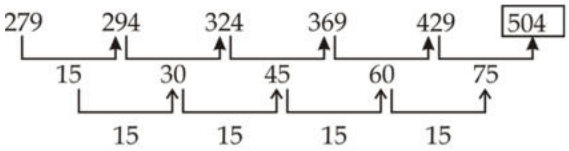
39. (e); $Required\ value = \frac{24+18-14-16}{100} \times 4400$

$= \frac{12}{100} \times 4400 = 528$

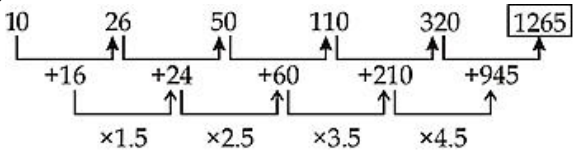
40. (c); $Required\% = \frac{18}{24} \times 100 = 75\%$

41. (b); Pattern is
18 × 3 + 1 = 55
55 × 3 + 2 = 167
167 × 3 + 3 = 504
504 × 3 + 4 = 1516

42. (a); Pattern is

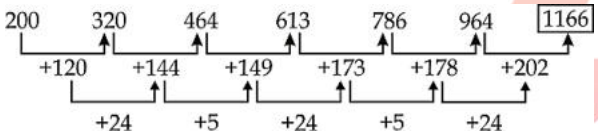


43. (d); Pattern is



44. (b); Pattern is
$\frac{286}{2} - 1 = 142, \frac{142}{2} - 1 = 70, \frac{70}{2} - 1 = 34, \frac{34}{2} - 1 = 16$

45. (c); Pattern is



46. (d); $\frac{187}{357} \times (42)^2 - 22 \times 38 = \frac{?}{4}$
$\frac{11}{21} \times 42 \times 42 - 22 \times 38 = \frac{?}{4}$
22 (42 – 38) × 4 = ?
? = 352

47. (b); 44 × 46 – 160% of 950 = 21 × ?
2024 – 1520 = 21 × ?
$? = \frac{504}{21} = 24$

48. (c); ? = 1126 – 986 = 140

49. (a); 77% × 150 + 37.5% × 260 = ?% × 284
115.5 + 97.5 = ?% × 284
$\frac{213}{284} \times 100 = ?$
? = 75

50. (b); $? = (7 + 9 - 4 + 5 - 6 - 3) + \left(\frac{1}{6} + \frac{2}{3} - \frac{1}{2} + \frac{5}{6} - \frac{1}{2} - \frac{1}{6}\right) = 8 + \frac{1}{2} = 8\frac{1}{2}$

51. (d); $\frac{2^5 \times 2^7 \times 8^4}{4^3 \times 16^3} = 2^?$
$2^? = \frac{2^{12} \times 2^{12}}{2^6 \times 2^{12}} = 2^6$
⇒ ? = 6

52. (b); $\sqrt{576} \times \sqrt{6561} = ? \times \sqrt{11664}$
⇒ ? × 108 = 24 × 81
$\Rightarrow ? = \frac{24 \times 81}{108} = 18$

53. (d); $\frac{306}{69} \times \frac{483}{34} \times \frac{25}{63} = ?^2$
$\Rightarrow ?^2 = 25$
⇒ ? = 5

54. (a); $\frac{0.4 \times 220 \times 18}{48} = ? \times 11$
⇒ ? = 3

55. (e); 22.5% of 120 + 47.5% of 360 = ? × 11
⇒? × 11 = 27 +171
$\Rightarrow ? = \frac{198}{11} = 18$

56. (d); $\frac{40}{100}y - \frac{20}{100}x = 270$
⇒ 2y – x = 1350 ...(i)
$and\ \frac{40}{100}x - \frac{20}{100}y = 0$
2x – y = 0 ...(ii)
On solving (i) & (ii)
x = 450
y = 900
Required sum = 1350

57. (b); $Speed\ of\ Aman = \frac{2340}{18} = 130\ m/s$
$Speed\ of\ Satish = \frac{40}{100} \times 130 = 52\ m/s$
$Time\ taken\ by\ Satish = \frac{468}{52} = 9\ seconds$

58. (d); Let C.P. of A = x
Marked price of article = 1.2x
ATQ,
1.2x × 0.9 – 1.2x × 0.8 = 4.8
1.2x × 0.1 = 4.8
x = 40

59. (b); Let, speed of stream = x
Speed of boat = 3x
ATQ,
$\frac{60}{3x+x} + \frac{60}{3x-x} = 4.5$
$\frac{60}{4x} + \frac{60}{2x} = 4.5$
$\frac{15}{x} + \frac{30}{x} = 4.5$
⇒ x = 10
Speed of boat = 30 km/hr

60. (c); $\pi r^2 = 616$
⇒ r = 14 m
Perimeter of rectangle = Perimeter of circle
$= 2\pi r = 2 \times \frac{22}{7} \times 14 = 88$
And,
$2(\ell + b) = 88$
(1.2b + b) = 44

2.2b=44
b = 20
ℓ = 24
$Diagonal = \sqrt{20^2 + 24^2} = \sqrt{976} = 4\sqrt{61}m$

61. (a); Speed downstream = (15 + 3) = 18 kmph
Speed upstream = (15 − 3) = 12 kmph
Let the required distance be x km.
$Then, \frac{x}{18} + \frac{x}{12} = \frac{75}{60}$
$\Rightarrow 2x + 3x = \left(\frac{5}{4} \times 36\right)$
⇒ 5x = 45
⇒ x = 9
Hence, the required distance is 9 km.

62. (d); Places: - - - - -
Digits: 4 4 4 6 6
Total number of sequences = 4 × 4 × 4 × 6 × 6 = 2304.

63. (b); In this case we need to select the probability of choosing one bag out of two given bags which will be $=\frac{1}{2}$
So the required probability
$=\frac{1}{2}$ (Red ball from bag 1 + Red ball from bag 2)
$= \frac{1}{2}\left(\frac{7}{14} + \frac{5}{14}\right) = \frac{12}{28} = \frac{6}{14} = \frac{3}{7}$

64. (e); Let the Present age of Veer and his grandfather be x and y.
ATQ,
$\frac{y-6}{x-6} = \frac{11}{1}$
$\Rightarrow y - 6 = 11x - 66 \ldots\ldots\ldots (i)$
And,
$\frac{y+18}{x+18} = \frac{3}{1}$
$\Rightarrow y + 18 = 3x + 54 \ldots\ldots\ldots (ii)$
On solving (i) and (ii), We got
$x = 12\,; y = 72$
Required Ratio = $\frac{12+6}{72+6} = \frac{18}{78} = \frac{3}{13}$

65. (b); Let 'l' be the length of field
ATQ, $l = 1.5b$
$l \times b = 486$
$1.5b^2 = 486$
$b = 18$
$\Rightarrow l = 27$
Cost of fencing = 2×(18+27)×11=Rs.990

66. (d); Let the numbers are x, y and z (in ascending order)
ATQ,
x + y + z = 44 × 3 = 132
x + y = 72
⇒ z = 60
$\Rightarrow x = \frac{60}{15} \times 8 = 32$
⇒ y = 132 – 60 – 32 = 40
Required difference = 40 – 32 = 8

67. (d); ATQ,
Initially Quantity of milk
$= \frac{3}{5} \times 25 = 15\ell$
Initially quantity of water
$= \frac{2}{5} \times 25 = 10\ell$
'x' ℓ of water is added to make the ratio of milk and water 1 : 1 ⇒ Quantity of milk initially is same as quantity of water after adding 'x' ℓ water = 15ℓ.
⇒ x = 15 – 10 = 5ℓ
Quantity of total mixture now = 25 + 5 = 30ℓ.
'y' ℓ of milk is added now to make the proportion of milk and water same as before = 3 : 2
$\Rightarrow \frac{3}{5} = \frac{15+y}{30+y}$
⇒ 90 + 3y = 75 + 5y
2y = 90 – 75
y = 7.5 ℓ
$Required\ \% = \frac{7.5-5}{5} \times 100 = \frac{2.5}{5} \times 100 = 50\%$

68. (c); Let upstream speed = x
Downstream speed = 11x
$Speed\ of\ boat = \frac{1}{2}(x + 11x) = 30$
$\Rightarrow x = \frac{30 \times 2}{12} = 5$
⇒ upstream speed = 5 km/hr
Distance travelled in 5 hours in upstream = 5 × 5 = 25 km

69. (c); Let A's age, B's age and C's age is a, b and c respectively
a + b + c = 3 × 27 – 15 = 81 − 15 = 66 ...(i)
$\frac{a-6}{b-6} = \frac{6}{7} \Rightarrow 7a - 6b = 6 \quad \ldots (ii)$
b = c – 8 ...(iii)
Use (i), (ii) & (iii)
$\frac{6b+6}{7} + b + b + 8 = 66$
$\frac{6b+b+7b+7b+56}{7} = 66$
20b = 66 × 7 – 62 = 400
b = 20
a = 18
c = 28
Required difference = 28 – 18 = 10 years

70. (e); Let C.P. of 1 bat = 4x
$S.P.\ of\ 1\ bat = 4x \times 1.25 = 5x$
$C.P.\ of\ 1\ ball = \frac{4x \times 5}{4} = 5x$
S.P. 1 ball = 5x × 1.4 =7x
ATQ,
5x + 7x – 4x – 5x = 45
3x = 45
x = 15
cost price of one ball = 15 × 5 = Rs. 75

ENGLISH LANGUAGE

71. (c); The passage says : Haridatta's son killed snake because he thought the anthill must be full of gold and thus if he kills the cobra, he can collect all the gold in an instant, instead of having to waste his time coming here everyday which clearly shows that he was greedy. Thus, (c) is the correct option.

72. (b); A diamond was the cobra's final gift to the Brahmin.

73. (b); Haridatta was astonished to see this and he thought, "This cobra must really be the god of this land. I have never seen or worshiped him before, which is probably why I am not able to get anything from the land." So, (b) is the correct option.

74. (a); 'The Cobra and The Brahmin' is the most appropriate title of the passage.

75. (c); Haridatta's son killed snake because he thought the anthill must be full of gold and thus if he kills the cobra, he can collect all the gold in an instant, instead of having to waste his time coming here everyday which clearly shows that he was greedy. Thus, (c) is the correct option.

76. (c); **Humble** means having or showing a modest or low estimate of one's importance. So, meek is the word which is similar in meaning to it.

77. (e); **Astonished** means greatly surprised or impressed. So, surprised is the word which is similar in meaning to it.

78. (a); **Stretch out** means to stretch oneself out on the ground. So, Lie-down is the word which is similar in meaning to it.

79. (e); **Deftly** means that sense of doing something both skillfully and quickly. So, Sluggishly is the word which is opposite in meaning to it.

80. (d); **In an instant** means if something happens in an instant, it happens very rapidly. So, One each day is the word which is opposite in meaning to it.

81. (b); 'Assessing, with' is the correct use because to **assess** the situation we evaluate or estimate the nature, ability, or quality of it and **with** is used to indicate being together or being involved.

82. (d); 'tried, deceive' is the correct use because 'to deceive' is making the correct sense here which makes sentence structure grammatically correct.

83. (d); 'have, owns' is the correct use because both the words when used together makes correct sense where **own** is used with a possessive to emphasize that someone or something belongs or relates to the person mentioned.

4. (a); The correct use is 'concluded, resorted' where 'concluded' means to bring or come to an end and 'resorted' means turn to and adopt (a course of action, especially an extreme or undesirable one) so as to resolve a difficult situation.

85. (c); The correct use is 'allowed, extortion' where 'extortion' means the practice of obtaining something, especially money, through force or threats.

For questions (86-90); The correct sequence to form meaningful paragraph is **BADEFC**.

86. (a); **87. (c);** **88. (d);**

89. (e); **90. (a);**

91. (b); 'to' will be used in place of 'in' as after 'junior, senior, inferior, superior, prior, anterior', preposition 'to' is used.
Ex. She is junior to me.

92. (a); 'for' will be used in place of 'from' as in present perfect continuous or present perfect tense , 'for' is used to represent the period of time.
Ex. He has been living with me for the last one year.

93. (a); 'received' will be used in place of 'receive' as the sentence is in past tense as is indicated by 'already over'.

94. (a); 'we would have' will be used in place of 'we had' as for unreal situation of past 'Subject + would/ could/ might/ should + have + V3' is used.
Ex. I would have helped you if you had come earlier.

95. (c); 'from' will be used in place of 'of' as preposition 'from' is used after 'suffer'.
Ex. He is suffering from fever.

96. (c); 'had' will be used in place of 'has' as the sentence is in past tense.

97. (d); 'go' will be used in place of 'goes' as the subject of 'that- clause' is plural, therefore plural verb is used.
Ex. Oil and water do not mix

98. (a); 'who' should be replaced by to 'whom'

99. (b); 'was' will be used in place of 'were' as the subject of 'that- clause' is 'one'.
Ex. One of these girls is very beautiful.

100. (c); 'depends' will be used in place of 'depend' as the subject of the sentence is singular.

Mock 49

RBI Assistant Mains 2017

REASONING ABILITY

Directions (1-5): Study the following information carefully and answer the given questions:
Ragini, Roshini, Rahul, Renu, Rajee v, Rashmi, Rohit and Rocky are sitting around a square table in such a way that four of them sit at four corners of the square while four sit in the middle of each of the four sides. The ones who sit at the four corners face the centre while those who sit in the middle of the sides face outside. Two females sit in the middle of the sides and two at the corners. Ragini sits second to the left of Rohit. Rohit sits in the middle of one of the sides. Rahul sits fourth to the right of his wife and his wife is not an immediate neighbour of Ragini or Rohit. Roshini sits third to right of her husband. Roshini does not sit at any of the corners. Only Renu sits between Roshini and Rocky. Rocky is the husband of Ragini. Rajeev is a male.

1. Which of the following is true with respect to the given seating arrangement?
(a) No two males are immediate neighbours of each other.
(b) Rohit and Rocky are immediate neighbours of each other.
(c) Rajeev and Renu are immediate neighbours of each other
(d) Rashmi is a male and sits diagonally opposite to Rajeev
(e) Ragini sits at the centre of one of the sides of the square table

2. Who amongst the following is Roshini's husband?
(a) Rahul (b) Rohit (c) Rajeev
(d) Rashmi (e) Cannot be Determined

3. How many people sit between Roshini and Rahul when counted in anti-clockwise direction from Roshini?
(a) None (b) One (c) Two
(d) Three (e) Four

4. Who amongst the following is the wife of Rahul?
(a) Renu (b) Rashmi (c)Roshini
(d) Rohit (e) Cannot be determined

5. What is the position of Rajeev with respect to Rahul?
(a) Immediately to the left
(b) Second to the right
(c) Third to the right
(d) Immediately to the right
(e) Second to the left

Directions (6-7): In each of the questions given below two statements I and II are given. You have to determine whether the data given in the statements is sufficient to answer the question or not.
(a) if the data given in statement I is sufficient to answer the question whereas data given only in statement II is not sufficient to answer the question.
(b) if the data given only in statement II is sufficient to answer the question whereas data given only in statement I is not sufficient to answer the question.
(c) if the data given either only in statement I or only in statement II is sufficient to answer the question.
(d) if the combined data given in statement I and statement II are not sufficient to answer the question.
(e) if the combined data given in statement I and statement II are necessary to answer the question.

6. In a code language, what do 'Pa' mean ?
I. In that code language 'Pe Bo Pa' means 'look at me' and `Bo Se Pe Ki' means 'don't look at him'
II. In that code language `Ka Ta Ne Pa' means 'take me and go' and `Li Wa Si Pa' means 'either me or you'.

7. What is the relation between Seema and Mangesh?
I. Shalini is cousin of Mangesh and niece of Seema.
II. Sulekha, sister of Seema, and wife of Omkar who is father of Mangesh.

8. In which of the following expressions does the expressions L < P' does not hold true?
(a) $P > N \geq M = L$ (b) $L = N \leq M < P$
(c) $P < N \leq M \leq L$ (d) $L < M = N \leq P$
(e) $L < M < N < P$

9. Which of the following expressions will be true, if the expression 'J ≥ H = I > K' is definitely true?
(a) $J \geq K$ (b) $K < H$ (c) $I \geq J$
(d) $K = J$ (e) None of These.

Directions (10-14): Study the following information carefully and answer the questions given below
Seven people Meena, Maya, Monika, Monalisha, Mamta, Meenakshi and Madhuri have their weekly offs on different days of the week i.e. Sunday, Monday, Tuesday, Wednesday, Thursday, Friday and Saturday not necessarily in that order. Each of them has a liking for different cuisine i.e. Indian, Italian, Mexican, Chinese, Spanish, Continental and Thai, not necessarily in that order. Maya likes Thai food and gets his weekly off on Thursday. Monalisha likes Italian food and does not have off on Sunday. Mamta has weekly off on Saturday and Madhuri has his weekly off on Tuesday. Meenakshi likes continental food whereas the one who has weekly off on Monday likes Mexican cuisine. Monika does not like Spanish cuisine and has weekly off on Wednesday. The one who likes Indian food does not have a weekly off on Tuesday or Wednesday.

10. Who has a weekly off on Friday?
(a) Monika (b) Madhuri
(c) Meenakshi (d) Data inadequate
(e) None of these

11. What cuisine does Madhuri like?
(a) Continental (b) Indian (c) Italian
(d) Spanish (e) None of these

12. On which day does Meena have weekly off ?
(a) Tuesday (b) Friday (c) Monday
(d) Sunday (e) None of these

13. Who likes Chinese cuisine?
(a) Monika (b) Monalisha (c) Madhuri
(d) Meena (e) None of these

14. On which day does Meenakshi have weekly off?
(a) Monday (b) Sunday
(c) Wednesday (d) Data inadequate
(e) None of these

Direction(15-19): Study the following information carefully to answer the given questions:
Eight persons i.e. I, J, K, L, M, N, O and P are sitting in a straight line facing north. Each one of them has passed a recruitment exam and must join the office in different months viz. January, February, March, April, May, June, July and August but not necessarily in the same order.
P sits third to the right of the person whose joining date is in January. Neither I nor M has joining dates in January. P's joining date is not in August. O sits third to the right of the person who joins in May. The person who joins in August sits second to the right of O. I and M are immediate neighbors of each other. Neither I nor M is an immediate neighbor of O. Only one person sits between M and J. K joins two months before July. M joins after April. Only two people sit between M and the person whose joining date is in July. The person whose joining date is in February sits to the immediate left of L. O joins after I.

15. What is the position of 'O' with respect to the one whose joining month is January?
(a) Second to the right (b) Immediate right
(c) Second to the left (d) Third to the right
(e) None of these

16. Who amongst the following sits exactly between M and J?
(a) The person whose joining date is in May
(b) The person whose joining date is in January
(c) L
(d) I
(e) The person whose joining date is in August.

17. Which of the following is true regarding L?
(a) Only two people sit to the left of L
(b) L is sitting third to the right of the person whose joining date in July
(c) M and J are immediate neighbours of L
(d) L's joining date is in May
(e) None of these

18. Four of the following five are alike in a certain way, and so form a group. Which of the following does not belong to the group?
(a) January (b) March (c) June
(d) May (e) July

19. Who sits at the end of the table?
(a) I, the one whose joining month is June
(b) The one whose joining month is April, P
(c) I, O
(d) The one whose joining month is March and August
(e) None of these

Directions (20-24): Study the given information and answer the following questions:
When a machine is given an input line of words and numbers it arranges them following a particular rule. The following is an illustration of input and rearrangement:
(All the numbers are two-digit numbers)
Input: 40 made butter 23 37 cookies salt extra 52 86 92 fell now 19
Step I: butter 19 40 made 23 37 cookies salt extra 52 86 92 fell now
Step II: cookies 23 butter 19 40 made 37 salt extra 52 86 92 fell now
Step III: extra 37 cookies 23 butter 19 40 made salt 52 86 92 fell now
Step IV: fell 40 extra 37 cookies 23 butter 19 made salt 52 86 92 now
Step V: made 52 fell 40 extra 37 cookies 23 butter 19 salt 86 92 now
Step VI: now 86 made 52 fell 40 extra 37 cookies 23 butter 19 salt 92
Step VII: salt 92 now 86 made 52 fell 40 extra 37 cookies 23 butter 19
Step VII is the last step.
As per the rules followed in the given steps, find out the appropriate steps for the given input.
Input: 32 proud girl beautiful 48 55 97 rich family 61 72 17 nice life

20. How many steps will be required to complete the given input?
(a) Five (b) Six (c) Seven
(d) Eight (e) Nine

21. Which of the following is the third element from the left end of step VI?
(a) beautiful (b) life (c) 61
(d) nice (e) 17

22. Which of the following is step III of the given input?
(a) proud 72 girl 48 family 32 beautiful 17 55 97 rich 61 nice life
(b) life 55 girl 48 family 32 beautiful 17 proud 97 rich 61 72 nice
(c) girl 48 family 32 beautiful 17 proud 55 97 rich 61 72 nice life
(d) family 32 beautiful 17 proud girl 48 55 97 rich 61 72 nice life
(e) girl 48 life 55 family 32 beautiful 17 proud 97 rich 61 72 nice

23. What is the position of "nice" from the left end in the final step?
(a) Fifth (b) Sixth (c) Seventh
(d) Eighth (e) Ninth

24. Which element is third to the right of 'family' in Step V?
(a) beautiful (b) 17 (c)proud
(d) 97 (e) (c)2

Directions (25-29): Study the following information carefully and answer the given questions.
Nine persons – P, Q, R, S, T, U, V, W and Z – stay in a building, but not necessarily in the same order. The building has nine floors and only one person stays on each floor. All of them have like clothes of different brands i.e. Max, Puma, Lifestyle, Woodland, Adidas, Pantaloons, diesel, Van Heusen and Lee, but not necessarily in the same order. The ground floor is numbered 1, the floor above it is numbered 2, and so on, and the topmost floor is numbered 9.
U likes clothes of Adidas and stays on an odd-numbered floor. P stays on an even-numbered floor below the even numbered floor on which W stays. S stays on the second floor and likes Woodland brand. The one who likes Puma brand stays on the fourth floor. P does not like diesel brand. There are two floors between the floors on which the persons who likes the Adidas brand and the person who likes Van Heusen brand stay. There are three floors between the floors on which R and U stay. R likes Lifestyle brand. T stays on the floor immediately above Z's. There is only one floor between the floors on which U and V stay. U does not like Lee brand. The one who likes the Max brand stays on the topmost floor. V does not stay on the ground floor. T stays on the fourth floor. Q stays on the floor immediately above W. The one who likes the Van Heusen brand stays immediately above V. Z likes Lee brand.

25. Who among the following likes the 'Van Heusen' brand?
(a) Q (b) U (c) Z
(d) W (e) None of these

26. P likes which of the following brand?
(a) Lee (b) Puma (c) diesel
(d) Pantaloons (e) None of these

27. How many floors are there between the floors on which W and U stay?
(a) One (b) Two (c) Three
(d) Four (e) None of these

28. On which of the following floors does R stay?
(a) 1st (b) 2nd (c) 6th
(d) 3rd (e) None of these

29. Which of the following is true as per the given information?
(a) W stays on the floor immediately below the floor on which U stays.
(b) R stays on the floor immediately above the floor on which T stays.
(c) V stays on the 6th floor.
(d) V likes diesel brand.
(e) None of these

Directions (30-32): Each of the questions below consists of a question and two statements numbered I and II given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and give answer
(a) if the data in statement I alone are sufficient to answer the question, while the data in statement II alone are not sufficient to answer the questions.
(b) if the data in statement II alone are sufficient to answer the question, while the data in statement I alone are not sufficient to answer the question.
(c) if the data either in statement I alone or in statement II alone are sufficient to answer the question.
(d) if the data in both the statements I and II together are not sufficient to answer the question.
(e) if the data in both the statements I and II together are necessary to answer the question.

30. How is T related to S?
I. S is the only son of Q, who is father-in-law of T.
II. T is daughter-in-law of P's mother.

31. In which school does L study among schools P, Q, R, S and T?
I. J and B study in school R and T respectively.
II. L does not study in the same school in which either J or B studies.

32. What is A's position with respect to B, when A, B, C, D and E are sitting around a circle facing the centre?
I. C is second to the left of E and second to the right of B.
II. D is not an immediate neighbour of E.

33. Pointing to a photograph, Ranjit said, "She is the daughter of the son of my grandfather's only brother." How is the lady related to Ranjit?
(a) Cousin (b) Niece (c) Sister
(d) Can't say (e) None of these

34. Introducing a woman, Soniya said, 'She is the daughter-in-law of the grandmother of my father's only son." How is the woman related to Soniya ?
(a) Mother –in-law (b) Mother (c) Son
(d) Daughter (e) None of these.

35. In a row, ruby is sitting 6th from the right end and soni is sitting 5th from the left end. ruby is at 20th position to right of soni. Find the total number of girls in the row?
(a) 25 (b) 28 (c) 22
(d) 30 (e) 34

Directions (36-40): Study the following information carefully and answer the questions given below:
A, B, C, D, E, F, G and H are eight persons. Each is a professor of a different subject like Maths, Physics, Hindi, English, Geology, Zoology, Botany and History. Each of them having different hobby like Riding, Music, Poetry, Shayari, Painting, Rafting, Cooking and Swimming but not necessarily in the same order. A who likes cooking is a professor of neither History nor Geology. B is a professor of English and does not like either Riding or Poetry. The one who is a professor of Maths likes Shayari. The one who likes Swimming is a professor of Physics and the one who is a professor of Botany likes Music. H doesn't like Painting. E and F like Music and Rafting, though not necessarily in the same order. D likes Swimming. G is a professor of Zoology and doesn't like Riding. The one who is a professor of Geology likes Rafting. C is not a professor of History. The one who is a professor of Hindi doesn't like either Poetry or Painting.

36. Who among of the following likes Riding?
(a) A (b) B (c) D
(d) H (e) None of these

37. Who among of the following is a professor of History?
(a) E (b) F (c) B
(d) H (e) None of these

38. C is a professor of which of the following subjects?
(a) Maths (b) Geology (c) Zoology
(d) Hindi (e) None of these

39. Which of the following combinations is definitely correct?
(a) C-Maths-Music (b) F-Botany-Music
(c) D-Zoology-Riding (d) B-English-Painting
(e) None is correct

40. Which of the following combinations is incorrect?
(a) D-Swimming (b) A-Hindi (c) G-Rafting
(d) C-Shayari (e) None of these

QUANTITATIVE APTITUDE

41. B is 6 years older than A. If the ratio of B's age 9 years hence and C's present age is 9 : 8. Average present age of C and D is 25 and age of D is greater than age of C. Difference between sum of present age of A and C to the sum of present age of B and D is 8. What will be age of D after 5 year.
(a) 18 years (b) 25 years (c) 31 years
(d) 24 years (e) 48 years

42. If the ratio of curved surface area to the volume of cylinder is 1 : 7 while the ratio of diameter to the height of cylinder is 4 : 3. Find total surface area of cylinder?
(a) 3100 sq unit (b) 3180 sq unit (c)3000sq unit
(d) 3080 sq unit (e) None of these

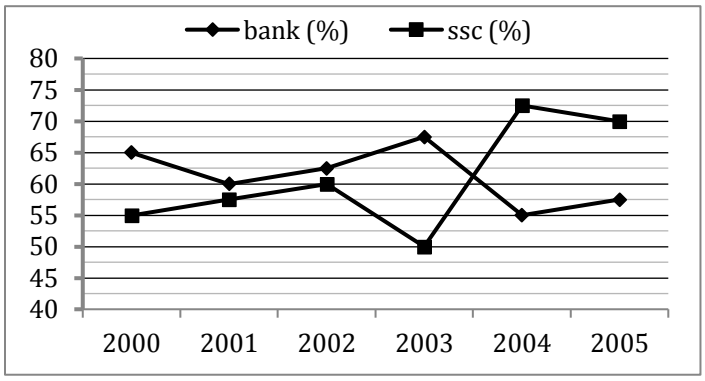
43. The average age of mother, father and son was 42 yrs at the time of marriage of the son. After one year an infant was born in the family After 6 yrs of the marriage, the average age of the family is 36 years. What was the age of the bride at the time of marriage.
(a) 25 yrs. (b) 23 yrs. (c) 22 yrs.
(d)24 yrs. (e) None of these

44. A certain number of trucks were required to transport 60 tons of steel wire from the TISCO factory in Jamshedpur. However, it was found that since each truck could take 0.5 tons of cargo less, another 4 trucks were needed. How many trucks were initially planned to be used?
(a) 10 (b) 15 (c) 20
(d) 25 (e) 24

45. A cyclist left point A for point B and travelled at the constant speed of 25 km/h. When he covered the distance of 25/3 km, he was overtaken by a car that left point A twelve minutes after the cyclist and travelled at a constant speed too. When the cyclist travelled another 30 km, he encountered the car returning from B. Assume that the car did not stop at point B. Find the distance between A and B.
(a) 39.5833 km (b) 41.0833 km
(c) 60.833 km (d) 43.33 km
(e) 50 km

Directions (46-50): Study the data given below carefully and answer the following questions based on these data.
Given below is the table which shows number of students participated (in thousand) in BANK exam and SSC exams from year 2000 to year 2005. There is also a line graph which shows percentage of qualified students in BANK exam and SSC exam

Year	No. of student (in thousand)	
	BANK	SSC
2000	85	90
2001	90	100
2002	95	105
2003	110	85
2004	80	85
2005	90	95



46. Number of qualified candidates in BANK exam in 2002 is what percent more or less than the failed candidates of SSC exam in 2001.
(a) 41% (b) 39.71% (c) 36.5%
(d) 42.5% (e) 35.80%

47. Maximum growth of qualified candidates in BANK exam is recorded in which year ?
(a) 2001 (b) 2002 (c) 2003
(d) 2004 (e) 2005

48. Ratio between the total failed student in 2004 in both exam and qualified student of BANK exam in 2000 is:-
(a) 351 : 442 (b) 451 : 342 (c) 442 : 453
(d) 229 : 189 (e) 475 : 442

49. Find the average number of students qualified in SSC exam in all year. (Consider nearest integer).
(a) 55938 (b) 54620 (c) 56771
(d) 52940 (e) 58478

50. FIND THE DIFFERENCE BETWEEN SUM OF QUALIFIED STUDENT OF SSC EXAM IN 2002, 2003, 2004 AND SUM OF QUALIFIED STUDENTS OF BANK EXAM IN 2001, 2003, 2005.
(a) 11350 (b) 12455 (c) 13775
(d) 12875 (e) 14780

Directions (51-55): In each of the following questions, 3 statements are given , you have to determine that which statement/statements are necessary to answer the question.

51. A sum of money Rs 2550 is to be distributed among Krishna, Vijay and Ramaswami. What will be the share of Vijay?
A. Krishna's share is 1.5 times Vijay's share,
B. Ramaswami's share is half the share of Krishna and Vijay together.
C. The share of Krishna is Rs 340 more than Vijay.
(a) Either A and B together or A and C together are sufficient
(b) Only A and B together are sufficient
(c) Only A and C together are sufficient
(d) All statements are required
(e) Any 2 of the 3 statements are sufficient

52. Find the average of present ages of P, Q and R.
A. The average age of P, Q and R 15 years ago was $33\frac{1}{3}$ years.
B. The present ages of P, Q and R are in the ratio of 8 : 9 : 12.
C. The average age of P, Q and R 15 years hence is $63\frac{1}{3}$ years
(a) A and B are sufficient
(b) B and C are sufficient
(c) Statement B and either statement A or statement C are sufficient
(d) Either A or C is sufficient
(e) All together are necessary

53. A, B and C secured 45%, 50% and 60% marks respectively in Biology. D's marks in Biology are 10 more than A's marks and 20 less than C's marks. Find out the overall percentage of marks taking marks of the four students together.
A. The biology has maximum marks 200.
B. Total of D's and A's marks is 190.
C. C has obtained 120 marks.
(a) A and B are sufficient
(b) Only A is sufficient
(c) Either A and B together or C is sufficient
(d) All statements together are necessary
(e) The question can be answered even without the use of statements.

54. 40 students sit in rows and columns. How many students are seated in each column?
A. The number of rows is 62.50% of the number of columns.
B. The number of rows is 5/8 of the number of columns.
C. The number of rows is less than the number of columns.
(a) Only A (b) C and either A or B
(c) Only B (d) Either A or B
(e) All the statements are required

55. What is the total number of coins in a bag containing only 50-paise and one-rupee coins?
A. Total number of coins in the bag is equal to twice the number of 50-paise coins.
B. If the number of 50-paise coins decreased by 50%, the bag would have Rs 62.50.
C. If the number of one-rupee coins is decreased by 20%, the bag will have Rs 65.
(a) A and either B or C
(b) Any two of the 3 statements
(c) Any 1 of the 3 statements
(d) Only A and B together
(e) All statements are required

Directions (56- 60): Given below is the bar-graph which shows the total number of persons who are visiting Hotel Shivoy in 5 different months of year.

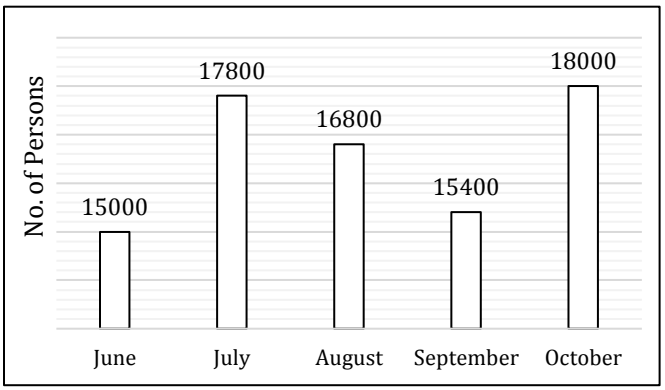


Table shows the percentage of foreigners in total number of persons visiting Hotel Shivoy in different months.

Months	% of persons who are foreigners
June	25%
July	18%
August	18%
September	23%
October	15%

Note- Total person= Indians + foreigners

56. If total Indian visitors in November are $2\frac{1}{17}$% of the total Indians visitors in October and total visitors are 4/3 rd of the total visitors in June. Then find the difference between foreigner and Indian who visited in November?
(a) 19820 (b) 18315 (c) 19370
(d) 17370 (e) 20210

57. If the ratio of male and female foreigners visiting Hotel Shivoy in month of September is 3 : 4, then foreigner males are what percent of foreigner females in September?
(a) 75% (b) 85% (c) 92%
(d) 60% (e) 70%

58. In month of August,if $33\frac{1}{3}$%of foreigners visiting are married and 25% of Indians are also married, while 1/4th of the remaining foreigners are unmarried females and $33\frac{1}{3}$% of the remaining Indians are unmarried females. Then find the total number of females visiting Hotel Shivoy in month of August (there are no polygamy males or females)?
(a) 6252 (b) 5468 (c) 6220
(d) 6174 (e) 6184

59. If the ratio of Indian male and female visitors in June is 2 : 3 and ratio of foreigner male & female visitors in August is 1 : 5, then find the ratio of Indian females visitors in June to foreigner males in August?
(a) 365 : 28 (b) 28 : 375 (c) 375 : 28
(d) 355 : 28 (e) 375 : 23

60. Foreigner visitors in October are what percent of Indian visitors in June?
(a) 28% (b) 27% (c) 36%
(d) 32% (e) 24%

Directions (61-65): What will come in the place of the question mark (?) in the following number series?

61. 120, 178, 238, 304, 382, ?
(a) 400 (b) 480 (c) 420
(d) 520 (e) 640

62. 42, 60, 94, 160, 274, ?
(a) 472 (b) 380 (c) 552
(d) 452 (e) 362

63. 8, 4, 6, 14, 44, ?
(a) 208 (b) 192 (c) 188
(d) 218 (e) 212

64. 50, 55, 63, 80, 104, ?
(a) 131 (b) 145 (c) 151
(d) 121 (e) 141

65. 360, 580, 804, 1032, 1264, ?
(a) 1400 (b) 1500 (c) 1600
(d) 1560 (e) 1540

66. A dishonest dealer marks up the price of his goods by 20% and gives a discount of 10% to the customer. Besides, he also cheats both his supplier and his buyer by 100 gram while buying or selling 1 kg. Find the percentage profit earned by the shopkeeper.
(a) 20% (b) 25% (c) 32%
(d) 27.5% (e) None of these

67. The Lucknow Indore Express without its wagons can go 24 km an hour, and the speed is diminished by a quantity that varies as the square root of the number of wagons attached. If it is known that with four wagons its speed is 20 km/h, the greatest number of wagons with which the engine can just move is
(a) 144 (b) 140 (c) 143
(d) 124 (e) None of these

68. The salary of a person is increased by Rs. 4800 and the rate of income tax is decreased by 2% from 12% to 10%. The effect is such that he is now paying the same income tax as before. If in both the cases, the standard tax(another tax) deduction is fixed at 20% of the total income, find the increased salary?
(a) Rs. 32,800 (b) Rs. 36,800 (c) Rs. 28000
(d) Rs. 28,800 (e) None of these

69. Concentrations of three wines A, B and C are 10%, 20% and 30% respectively. They are mixed in the ratio 2 : 3 : x resulting in a 23% concentration solution, Find x.
(a) 7 (b) 6 (c) 5
(d) 4 (e) None of these

70. Uday buys rice at Rs. 10/kg and puts a price tag on it so as to earn a profit of 20%. However, his faulty balance shows 1000 gm when it is actually 800 gm. What is his actual gain percentage?
(a) 50% (b) 40% (c) 18%
(d) 18% (e) 10%

Directions (71-75): In each of these questions, two equations (I) and (II) are given. You have to solve both the equations and give answer
(a) if x>y (b) if x≥y (c) if x<y
(d) if x ≤y
(e) if x = y or No relation can be established between x and y.

71. **I.** $3x^2 - 35x + 100 = 0$
II. $5y^2 - 49y + 120 = 0$

72. **I.** $2x - 15\sqrt{x} + 28 = 0$
II. $3y - 26\sqrt{y} + 56 = 0$

73. **I.** $x^2 = 15^2 - 19^2 + 280$
II. $y = \sqrt{23^2 - 17^2 - 71}$

74. **I.** $2x^2 + 9\sqrt{3}x + 27 = 0$
II. $5y^2 + 36\sqrt{3} + 192 = 0$

75. **I.** $2x^2 - 41x + 210 = 0$
II. $2y^2 - 39y + 190 = 0$

76. A man can row a distance of 2 km upstream in 15 minutes and returns the same distance in 10 minutes. How much time will he take to row the same distance upstream if due to a tide the speed of the current gets doubled ?
(a) 25 minutes (b) 45 minutes (c) 20 minutes
(d) 30 minutes (e) 40 minutes

77. Two trains have respective lengths as 230 m and 190 m. They cross each other completely in 21 s if they are travelling in the opposite direction and in 42 s if they are traveling in the same direction. Find the ratio of the speed of the two trains.
(a) 3 : 1 (b) 4 : 1 (c) 3 : 2
(d) 4 : 5 (e) 5 : 3

78. A person has 12 friends of whom 8 are relatives. In how many ways can he invite 7 friends such that at least 5 of them are relatives ?
(a) 284 (b) 384 (c) 456
(d) 512 (e) 428

79. The diameter of a road-roller is 42 cm and its length is 100 cm. It takes 400 complete revolutions moving once over to level the stretch of the road. If the cost of leveling is Rs. 100 per m^2 then the total cost of leveling works out to
(a) Rs. 52,800 (b) Rs. 5,280 (c)Rs.5,28,000
(d) Rs. 528 (e) Rs. 5.28

80. The biggest possible cube is taken out of a right solid cylinder of radius 15 cm and height 20 cm respectively. What will be the volume (in cm^3) of the cube?
(a) 8750 (b) $6750\sqrt{2}$ (c) $3750\sqrt{2}$
(d) 7500 (e) 8000

ENGLISH LANGUAGE

Directions (81-87): Read the following passage carefully and answer the questions given below it. Certain words/phrases are printed in bold to help you locate them while answering some of the questions.

The early Orientalist movement and the rapid growth of English as the principal medium of instruction after the 1830s, considerably enhanced the educated Indian's familiarity with his tradition. But, perhaps equally importantly, it also **fostered** a sense of shared culture. Ram Mohan may have been the first Hindu to have used the term 'Hinduism', thereby indicating some degree of culture or perhaps even ethnic essentialization. These developments were also facilitated by the coming of the printing press. Over time, the success of print-culture enormously increased the importance of written texts within a tradition that had hitherto greatly relied on orality. Perhaps this strengthened the hands of some writers who, particularly towards the end of the nineteenth century, began to emphasize a common cultural base for Hinduism. In the religious sphere, for example, there was now a far greater emphasis on the Vedas as a unified source of Hinduism, the 'prime determinant of a 'Hindu' identity.

The success of the printing press is also tied up with certain extremely important shifts that began to occur in the social and religious thinking of early nineteenth century Bengal. Hitherto, texts considered to be the most important in Hinduism had been zealously guarded by a class of Brahmins which prevented their wider circulation. Women and Sudras, for example, had traditionally been barred from Vedic knowledge. More importantly, these Hindu scriptures were composed in ' Sanskrit which meant that many other social groups besides women and Sudras had practically no access to the Vedas. Early reformers like Ram Mohan addressed these issues simultaneously. On the one hand, Ram Mohan bravely went against tradition by attempting to open up Vedic knowledge to all those who might be **moved** to seek it, irrespective of their social origin. This was the impulse behind his publication of Bengali translations of Hindu religious classics like the Vedanta Sutra (Brahma Sutra), and subsequently, some important Upanishads. This is also precisely why Ram Mohan became such a controversial figure.

81. Why did Ram Mohan become a controversial figure?
(a) He created awareness and sensitivity about our cultural heritage.
(b) He advocated that patriotism is a natural instinct among People
(c) He advocated that racial identity is crucial for political independence
(d) He opposed the move of opening the first Sanskrit college in Bengal
(e) He opened up the knowledge of Vedas to all the sections of the society

82. Which of the following factors contributed to the enhancement of educated Indian's familiarity with his tradition?
(a) Critical reappraisal of the sources of his knowledge about tradition
(b) The early criticism and negation of the Orientalist movement
(c) Awareness about the true spirit of Hinduism
(d) The rapid growth of English as the main medium of instruction
(e) Realization of the importance and acquisition of Hindu identity

83. Which of the following important shifts is the author of the passage talking about in the early 19th Century Bengal?
(a) Emphasizing the common culture base for Hinduism
(b) Fostering a sense of shared culture
(c) Studying carefully the religious classics like Vedanta Sutra and Upanishads
(d) Social and religious thinking of the people
(e) Political and economic thinking of the people

84. Why were the important texts of Hinduism not widely circulated?
(a) They were not easily available and cheaply priced
(b) People were not aware of the true knowledge contained in these texts
(c) They were ardently protected by the religious priests and preachers
(d) Orthodox thinking was more dominant than the rational thinking
(e) Ethics essentialisation was gravely missing among the people

85. The early Orientalist movement and English as the medium of instruction...
(a) Provided tacit but strong support to the liberation movement
(b) Increased understanding and awareness of the Indian education system
(c) Developed a sense of shared culture among the Indians
(d) Made Indians adequately emotional and nostalgic
(e) Encouraged students to obtain admissions in English medium educational institutions

86. Which of the following strengthened the hands of some writers towards the end of the 19th Century?
(a) Ram Mohan's use of the term 'Hinduism' for the first time
(b) Advent of the printing press and realisation of the importance of written texts
(c) Ram Mohan's insistence on the study of Indian texts and traditions
(d) Opening of Vedic knowledge to all the sections of the society
(e) Interference of the foreigners in the Indian cultural tradition

87. Choose the word which is **SIMILAR** in meaning to the word "**fostered**" as used in the passage.
(a) Promoted (b) Appreciated (c) Widened
(d) Aligned (e) Involved

Directions (88-95): Read the following passage carefully and answer the questions given below them. Certain words/phrases have been printed in bold to help you locate them while answering some of the questions.

The painter is now free to paint anything he chooses. There are scarcely any **forbidden** subjects, and today everybody is prepared to admit that a painting of some fruit can be as important as a painting of a hero dying. The Impressionists did as much as anybody to win this previously unheard-of freedom for the artist. Yet, by the next generation, painters began to abandon the subject altogether, and began to paint abstract pictures. Today the majority of pictures painted are abstract.

Is there a connection between these two developments? Has art gone abstract because the artist is embarrassed by his freedom? Is it that, because he is free to paint anything, he doesn't know what to paint? Apologists for abstract art often talk of it as the art of maximum freedom. But could this be the freedom of the desert island? It would take too long to answer these questions properly. I believe there is a connection. Many things have **encouraged** the development of abstract art. Among them has been the artists' wish to avoid the difficulties of finding subjects when all subjects are equally possible.

I raise the matter now because I want to draw attention to the fact that the painter's choice of a subject is a far more complicated question than it would at first seem. A subject does not start with what is put in front of the easel or with something which the painter happens to remember. A subject starts with the painter deciding he would like to paint such-and-such because for some reason or other he finds it meaningful. A subject begins when the artist selects something for special mention. (What makes it special or meaningful may seem to the artist to be purely visual its colours or its form.) When the subject has been selected, the function of the painting itself is to communicate and justify the significance of that selection.

It is often said today that subject matter is unimportant. But this is only a reaction against the excessively literary and moralistic interpretation of subject matter in the nineteenth century. In truth the subject is literally the beginning and end of a painting. The painting begins with a selection (I will paint this and not everything else in the world); it is finished when that selection is justified (now you can see all that I saw and felt in this and how it is more than merely itself).

Thus, for a painting to succeed it is essential that the painter and his public agree about what is significant. The subject may have a personal meaning for the painter or individual spectator; but there must also be the possibility of their agreement on its general meaning. It is at this point that the culture of the society and period in question **precedes** the artist and his art. Renaissance art would have meant nothing to the Aztecs and vice versa. If, to some extent, a few intellectuals can appreciate them both today it is because their culture is an historical one: its inspiration is history and therefore it can include within itself, in principle if not in every particular, all known developments to date.

When a culture is secure and certain of its values, it presents its artists with subjects. The general agreement about what is significant is so well established that the significance of a particular subject **accrues** and becomes traditional. This is true, for instance, of reeds and water in China, of the nude body in Renaissance, of the animal in Africa. Furthermore, in such cultures the artist is unlikely to be a free agent: he will be employed for the sake of particular subjects, and the problem, as we have just described it, will not occur to him.

When a culture is in a state of disintegration or transition the freedom of the artist increases-but the question of subject matter becomes problematic for him: he, himself, has to choose for society. This was at the basis of all the increasing crises in European art during the nineteenth century. It is too often forgotten how many of the art scandals of that time were provoked by the choice of subject (Gericault, Courbet, Daumier, Degas, Lautrec, Van Gogh, etc.).

By the end of the nineteenth century there were, roughly speaking, two ways in which the painter could meet this challenge of deciding what to paint and so choosing for society. Either he identified himself with the people and so allowed their lives to dictate his subjects to him; or he had to find his subjects within himself as painter. By people I mean everybody except the bourgeoisie. Many painters did of course work for the bourgeoisie according to their copy-book of approved subjects, but all of them, filling the Salon and the Royal Academy year after year, are now forgotten, buried under the hypocrisy of those they served so sincerely.

88. When a culture is insecure, the painter chooses his subject on the basis of:
(a) The prevalent style in the society of his time.
(b) Its meaningfulness to the painter.
(c) What is put in front of the easel.
(d) Past experience and memory of the painter.
(e) All of the above.

89. In the sentence, "I believe there is a connection" (second paragraph), what two developments is the author referring to?
(a) Painters using a dying hero and using a fruit as a subject of painting.
(b) Growing success of painters and an increase in abstract forms.
(c) Artists gaining freedom to choose subjects and abandoning subjects altogether.
(d) Rise of Impressionists and an increase in abstract forms.
(e) All of the above

90. Which of the following is NOT necessarily among the attributes needed for a painter to succeed?
(a) The painter and his public agree on what is significant.
(b) The painting is able to communicate and justify the significance of its subject selection.
(c) The subject has a personal meaning for the painter.
(d) The painting of subjects is inspired by historical developments.
(e) None of these

91. In the context of the passage, which of the following statements would NOT be true?
(a) Painters decided subjects based on what they remembered from their own lives.
(b) Painters of reeds and water in China faced no serious problem of choosing a subject.
(c) The choice of subject was a source of scandals in nineteenth century European art.
(d) Agreement on the general meaning of a painting is influenced by culture and historical context.
(e) All of the above

92. Which of the following views is taken by the author?
(a) The more insecure a culture, the greater the freedom of the artist.
(b) The more secure a culture, the greater the freedom of the artist.
(c) The more secure a culture, more difficult the choice of subject.
(d) The more insecure a culture, the less significant the choice of the subject.
(e) None of the above.

Direction (93): Choose the word/group of words which is most opposite in meaning to the word/group of words printed in bold as used in the passage.

93. Accrue
(a) accost (b) callous (c) frost
(d) fallout (e) dissipate

Directions (94-95): Choose the word/group of words which is most similar in meaning to the word/group of words printed in bold as used in the passage.

94. Precede
(a) filiation (b) dearth (c) redundant
(d) penetrate (e) antecedent

95. Encouraged
(a) solicit (b) trauma (c) invigorate
(d) inundate (e) ameliorate

Directions (96-100): The given sentence has two blanks. Each blank indicates that something has been omitted. Choose the set of words that best fit to the meaning of the sentence.

96. _____ dinasaurs are believed to be the ancestors of modern birds, the discovery of soft tissue in dinosaur fossils containing proteins found only in birds is very _____
(a) Though – unfortunate
(b) Recently – common
(c) Since - exciting
(d) Perhaps – remarkable
(e) Moreover - welcome

97. The Van Allen belts, which are _____ between 13,000 and 60,000 kilometres above the earth's surface, were discovered in 1958 and contain electrons which play _____ with electronic systems on satellites.
(a) somewhere- damages (b) located – havoc
(c) position - mayhem (d) situated – par
(e) vicinity – confusion

98. Rice farmers use _____ methods of farming and old equipment making the cost of rice _____ as much as it is in other countries.
(a) obsolete – economical
(b) modern – expensive
(c) future - virtuality
(d) antiquated – almost
(e) sustainable - approximate

99. Some experts believe that the best _____ to reduce the number of accidents caused by drivers using their mobile phones is to create an app _____ communications when the vehicle in is motion and unblocking them when the vehicle reaches its destination.
(a) tactic – block
(b) strategy – disabling
(c) part - facilitating
(d) decision – expediting
(e) method – further

100. Services provided by money transfer companies are _____ for people who don't have bank accounts or who are working far from home and are helpful to _____ trade and disperse wealth.
(a) fundamental – compute
(b) prerequisite – invigorating
(c) vitally – strengthen
(d) essentially - bolster
(e) Inherent - foster

Directions (101-105): In each of the following questions, five options are given and you have to choose the one which has some or any grammatical error in it. In the questions where the fifth option is "all are correct" and all the given four options are correct, choose option (e) as your choice.

101. (a) I believe that next time when you will be coming to Bombay, you will bring my book.
(b) I do not believe in denying its force, or running away in an opposite direction.
(c) We are all supposed to believe in the same thing in different ways.
(d) Lisa, I believe, did nothing; and Curll did what was expected.
(e) All are correct.

102. (a) I was pleased to think he had held on to the money I had given him.
(b) Why he wishes the god to be pleased with him, we shall have to enquire hereafter.
(c) This so pleased Noel that he advanced my wages to a dollar and a half a week.
(d) Thank you for your invitation for lunch which I am very pleased to accept.
(e) All are correct.

103. (a) They have got to live a man's life, pushing all these things before them, and get on as well as they can.
(b) Swiftly they drew near to the flaming colored suns, and passed close beside them.
(c) According to the agreements reached at WTO, commitment was made by all member countries to keep import tariffs low and eliminate all non-tariff barriers which could curb imports.
(d) When I offered him to help which he needed, he persisted in refusing it, so I left him to his fate.
(e) She has refused to evacuate Malta.

104. (a) Who has been responsible for all the trouble the world has known for ages?
(b) He only is responsible for the suffering caused to the whole family.
(c) I am sure the heat, and not the natural, beautiful activity of her mind, is responsible for her condition.
(d) You can't make me responsible for the acts of a person I don't know from Adam.
(e) All are correct.

105. (a) How sweet and pastoral are these cool resting-places in the heart of the Vosges!
(b) In a fit of temper he tore up a sweet letter which his wife had written to him.
(c) It is the emblem of a rustic maid in the sweet prime of her morning.
(d) It has been an advantage for that sweet girl to have been brought up by them.
(e) That sweet chocolate gaze softened and a smile touched the corners of his mouth.

Directions (106–110): Rearrange the following five sentences (A), (B), (C), (D) and (E) in the proper sequence to form a paragraph; then answer the questions given below them.

A. In order to find its feet in the new world order, India should work on the existing contours of its ties with China in the form of BRICS, the Shanghai Cooperation Organisation and the China-led Asian Infrastructure Investment Bank.
B. Interaction with like-minded countries is better than an over-reliance on an unpredictable America.
C. Simultaneously, it should also work with Japan, Australia and Germany in exploring new trade ties with Africa, South America and Southeast Asia on account of sea links.
D. America and China are placed at the two ends of the spectrum of international relations.
E. While the U.S. appears to be going its own way, China appears engaged in spreading its net looking for partnerships for its Belt and Road Initiative.

106. Which of the following should be the **FIRST** sentence after rearrangement?
(a) A (b) B (c) C
(d) D (e) E

107. Which of the following should be the **SECOND** sentence after rearrangement?
(a) E (b) D (c) C
(d) B (e) A

108. Which of the following should be the **THIRD** sentence after rearrangement?
(a) A (b) B (c) C
(d) D (e) E

109. Which of the following should be the **FOURTH** sentence after rearrangement?
(a) E (b) D (c) C
(d) B (e) A

110. Which of the following should be the **FIFTH (LAST)** sentence after rearrangement?
(a) A (b) B (c) C
(d) D (e) E

Directions (111-112): In each question, there are four or five sentences, each sentence has pair of words/phrases that are italicized or highlighted. From the italicized or highlighted word(s) phrase(s), select the most appropriate word(s)/phrase(s) to form correct sentences. Then, from the given options, choose the best one.

111. **Regrettably** [A]/ **Regretfully** [B] I have to decline your invitation.
I am drawn to the poetic, **sensual** [A] / **sensuous** [B] quality of her paintings.
He was **besides** [A] / **beside** [B] himself with rage when I told him what I had done.
After brushing against a **stationary** [A] / **stationery** [B] truck my car turned turtle.
As the water began to rise **over** [A] / **above** [B] the danger mark, the signs of an imminent flood were clear.
(a) BAABA (b) AAABA (c) BBBAB
(d) BBAAB (e) BABAB

112. Anita wore a beautiful **broach** [A]/ **brooch** [B] on the lapel of her jacket.
If you want to complain about the amenities in your neighbourhood, please meet your **councillor** [A]/ **counsellor** [B].
I would like your **advice** [A]/ **advise** [B] on which job I should choose. The last scene provided a **climactic** [A]/ **climatic** [B] ending to the film.
Jeans that **flair** [A] / **flare** [B] at the bottom are in fashion these days.
(a) BABAA (b) BABAB (c) BAAAB
(d) ABABA (e) BAABA

Directions (113-120): In the following passage there are blanks, each of which has been numbered. These numbers are printed below the passage and against each, five words / phrases are suggested, one of which fits the blank appropriately. Find out the appropriate word / phrase in each case.
It is noteworthy that the Prime Minister's working group set-up to suggest long-term solutions to ……..(**113**)…….. the growing demand for affordable food has acknowledged the use of biotechnology as integral to a second Green Revolution.
Although Indian agriculture serves as a good example of incorporating hybrid varieties of high-yielding crops, the attitude towards genetically modified or transgenic food has been sceptical. But cotton is the only ……..(**114**)…… crop currently approved for ……..(**115**)…… in India. But brinjal is under moratorium for commercial release. In a country where 65% of agricultural land is still ……..(**116**)……. on the monsoon, there needs to be far greater investment in biotechnology-driven solutions to increase yields.
True, there are valid health and environment ……..(**117**)…… regarding the adoption of GM crops. It is for this reason that adequate ……..(**118**)…… need to be in place to ensure consumer safety. But an ……..(**119**)…… rejection of genetically modified food would be. ……..(**120**)…….. to the country's food security.

113. (a) meet (b) suggest (c) complete
(d) seek (e) recommend

114. (a) food (b) transgenic
(c)high-yielding (d) genetic (e) organic

115. (a) research (b) hybrid (c) release
(d) launch (e) cultivation

116. (a) tilled (b) dependent (c) depends
(d) independent (e) available

117. (a) concerns (b) protests (c) factors
(d) yields (e) areas

118. (a) warnings (b) features (c) safeguards
(d) research (e) alerts

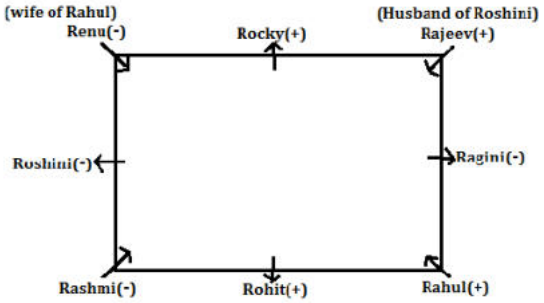
119. (a) accurate (b) hasty (c) absurd
(d) outright (e) honest

120. (a) risk (b) beneficial (c) attestation
(d) acrimonious (e) detrimental

Solutions

REASONING ABILITY

Directions (1-5);



1. (e); 2. (c); 3. (c);

4. (a); 5. (b);

Directions (6-7):

6. (c); Code for 'pa' is me. Either statement I or II is sufficient.

7. (d); From both statements, relation between seema and mangesh cannot be determined.

8. (c); P<N≤M≤L

9. (b); K<H

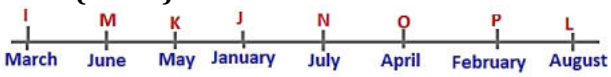
Directions (10-14):

Person	Off	Cuisine
Meena	Monday	Mexican
Maya	Thursday	Thai
Monika	Wednesday	Chinese
Monalisha	Friday	Italian
Mamta	Saturday	Indian
Meenakshi	Sunday	Continental
Madhuri	Tuesday	Spanish

10. (e); 11. (d); 12. (c);

13. (a); 14. (b);

Direction(15-19):



15. (a); 16. (a); 17. (b);

18. (c); 19. (d);

Directions (20-24): In each step a word and a number are arranged in each step.
Words are arranged in alphabetical order from left to right according to the English alphabet (for ex- A-B-C-D……..X-Y-Z.
Numbers are arranged in increasing order from the left to right.

Input: 32 proud girl beautiful 48 55 97 rich family 61 72 17 nice life
Step I: beautiful 17 32 proud girl 48 55 97 rich family 61 72 nice life
Step II: family 32 beautiful 17 proud girl 48 55 97 rich 61 72 nice life
Step III: girl 48 family 32 beautiful 17 proud 55 97 rich 61 72 nice life
Step IV: life 55 girl 48 family 32 beautiful 17 proud 97 rich 61 72 nice
Step V: nice 61 life 55 girl 48 family 32 beautiful 17 proud 97 rich 72
Step VI: Proud 72 nice 61 life 55 girl 48 family 32 beautiful 17 97 rich
Step VII: rich 97 proud 72 nice 61 life 55 girl 48 family 32 beautiful 17

20. (c); 21. (d); 22. (c);

23. (a); 24. (b);

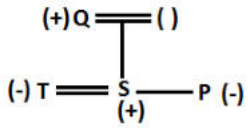
Direction(25-29):

FLOOR	PERSON	BRANDS
9	Q	MAX
8	W	VAN HEUSEN
7	V	DIESEL
6	P	PENTALOONS
5	U	ADIDAS
4	T	PUMA
3	Z	LEE
2	S	WOODLAND
1	R	LIFESTYLE

25. (d); 26. (d); 27. (b);

28. (a); 29. (d);

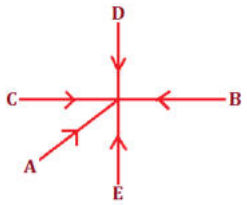
30. (e);



T is wife of S.
Hence, From statement I and II we get our final answer.

31. (d); (From I.)
J → R
B → T
From I and II.
L → P, Q, S
Hence, statements are not sufficient to answer the question.

32. (e);



A's position with respect to B is third to the right and second to the left.

33. (a); Cousin;

34. (b);

35. (d); ___ Soni _____(19 girls) __ Ruby ____

Total = 5+19+6 = 30

Direction (36-40):

Persons	Subject	Hobby
A	HINDI	COOKING
B	ENGLISH	PAINTING
C	MATH	SHAYARI
D	PHYSICS	SWIMMING
E	GEOLOGY/BOTANY	MUSIC/RAFTING
F	GEOLOGY/BOTANY	MUSIC/RAFTING
G	ZOOLOGY	POETRY
H	HISTORY	RIDING

36. (d); **37. (d);** **38. (a);**

39. (d); **40. (c);**

QUANTITATIVE APTITUDE

41. (c); Let present age of A, B, C and D is a, b, c and d respectively.

Now ATQ

$\Rightarrow b = a + 6$ ...(i)

$\Rightarrow \frac{b+9}{c} = \frac{9}{8} or \frac{a+15}{c} = \frac{9}{8}$

$c = \frac{8}{9}(a+15)$ ... (ii)

$\Rightarrow c + d = 50 \Rightarrow d = 50 - c$

Now

Difference = b + d – (a + c) = 8

Put the value of b, d and c in

$(a+6) + \left(50 - \frac{8}{9}(a+15)\right) - \left[a + \frac{8}{9}(a+15)\right]$

$= 8$

Solving

a = 12

b = 18

c = 24

d = 26

d's age after 5 year = 26 + 5 = 31

42. (d); $2\pi rh : \pi r^2 h = 1 : 7$ (where r is radius and h is height)

$2 : r = 1 : 7$

$\Rightarrow r = 14$

$\Rightarrow diameter : Height \Rightarrow 2r : h = 4 : 3$

$\Rightarrow h = 21$

Total surface area of cylinder= $2\pi r(r+h)$

$= 2 \times \frac{22}{7} \times 14\ (14+21)$

$= 88 \times 35$

$= 3080$

43. (a); Sum of the present age of mother, father and son = 42 × 3 + 6 × 3 = 126 + 18 = 144 years

Sum of the present age of family = 36 × 5 = 180

Present age of bribe = 180 – 144 – 5 = 31 years

Age of the bribe at the time of marriage = 31 – 6 = 25 years.

44. (c); *Let initially x number of truck required*

Capacity of one truck = $\frac{60}{x}$

Extra material left due to lower capacity = $\frac{x}{2}$ tons

According to the question,

$\frac{\frac{x}{2}}{\frac{60}{x} - \frac{1}{2}} = 4$

$\Rightarrow \frac{\frac{x}{2}}{\frac{120-x}{2x}} = 4$

$\Rightarrow x^2 + 4x - 480 = 0$

$\Rightarrow x = 20$

So, 20 Trucks were initially used to transport.

45. (c); *Time taken by Cyclist to reach 25/3 km* = $\frac{25}{25 \times 3} = \frac{1}{3}$ *hr = 20 min*

Car has taken to reach 25/3 km = 20 – 12 = 8 min

Speed of Car = $\frac{25}{\frac{3}{8}} \times 60 = 62.5$ km/h

Now time taken by cyclist to go further 30 km = $\frac{30}{25} = \frac{6}{5}$ hr = 72 min

Car will go in 72 min = $\frac{72}{60} \times 62.5 = 75$ km

Now, according to question,

Distance between first meeting and second meeting is 30

So,

Distance between first meeting and point B will be = $\frac{75+30}{2} = 52.5$ km

Required answer = 52.5 + 8.33 = 60.833 km

46. (b); Number of qualified candidates in BANK exam in 2002 = $95000 \times \frac{62.5}{100} = 59375$

Failed candidates in SSC exam in 2001 = $100000 \times \frac{42.5}{100} = 42500$

Required percentage = $\frac{59375-42500}{42500} \times 100$

$= \frac{16875}{425}\%$

= 39.70%

47. (c); Qualified candidates of BANK exam in different year,

In year, $2000 \Rightarrow 85000 \times \frac{65}{100} = 55250$

$2001 \Rightarrow 90000 \times \frac{60}{100} = 54000$ **decrease**

$2002 \Rightarrow 95000 \times \frac{62.5}{100} = 59375$ **increase**

$2003 \Rightarrow 110000 \times \frac{67.5}{100} = 74250$ **increase**

$2004 \Rightarrow 80000 \times \frac{55}{100} = 44000$ **decrease**

$2005 \Rightarrow 90000 \times \frac{57.5}{100} = 51750$ **increase**

Maximum growth is recorded in 2003 i.e; 74250 - 59375 = 14875

48. (e); Total failed student in 2004

$= 80000 \times \frac{45}{100} + 85000 \times \frac{27.5}{100} = 59375$

Qualified students of BANK exam in 2000 = 55250

Required ratio = 59375 : 55250

= 475 : 442

49. (c); Required average $= \frac{1}{6}\left[90000 \times \frac{55}{100} + 100000 \times \frac{57.5}{100} + 105000 \times \frac{60}{100} + 85000 \times \frac{50}{100} + 85000 \times \frac{72.5}{100} + 95000 \times \frac{70}{100}\right]$

$= \frac{1}{6}[340625] = 56771$

50. (d); Sum of qualified student in SSC exam = $105000 \times \frac{60}{100} + 85000 \times \frac{50}{100} + 85000 \times \frac{72.5}{100} = 167125$

Sum of qualified student in BANK exam = $90000 \times \frac{60}{100} + 110000 \times \frac{67.5}{100} + 90000 \times \frac{57.5}{100} = 180000$

Required difference = 180000 – 167125 = 12875

51. (e); St. A – K : V = 1.5 : 1

St. B – $R = \frac{1}{2}(K + V)$

St. C – $K = (340 + V)$

So using any 2 of the 3 statements we can determine the share of Vijay

52. (d); St. A, P + Q + R = 145

St. B, P : Q : R = 8 : 9 : 12

St. C, P + Q + R = 145

So Either A or C is sufficient

53. (e); Difference b/w marks of A and C = 30 marks

marks of A, B, C = 90, 100, 120

and D = A +10 = 100

A + B + C + D = 410

The question can be solved with the help of data given in questions

54. (d); Let there are x no. of columns

St. A – $0.625x \times x = 40, x^2 = 64$

$x = 8$, no. of rows = 5

St. B $-\frac{5}{8}x \times x = 40, x^2 = 64, x = 8$

no. of rows = 5

St. C–R < C

So either A or B is sufficient to answer the following questions

55. (b); Let 50 paise coin = x, 1 Rs coin = y

St. A $\rightarrow x + y = 2x, x = y$

St. B $\rightarrow \frac{\frac{0.5x}{2}}{} + y = 62.5$

St. C $\rightarrow \frac{x}{2} + 0.8y = 65$

So using any 2 of them we can find the value of x and y

56. (c); Total Indians in November

$= \frac{35}{1700} \times \frac{85}{100} \times 18000$

= 315

Total visitors in November

$= \frac{4}{3} \times 15000 = 20000$

∴ Foreigners visiting in November

= 20000 – 315 = 19685

∴ Required difference

= 19685– 315 = 19370

57. (a); Foreigner Males visiting in September

$= \frac{3}{7} \times \frac{23}{100} \times 15400$

= 1518

Females foreigner in September

$= \frac{4}{7} \times \frac{23}{100} \times 15400$

= 2024

∴ Required percentage $= \frac{1518}{2024} \times 100$

= 75%

Alternately,

Required ratio $= \frac{3}{4} \times 100 = 75\%$

58. (d); Foreigner who are married

$= \frac{18}{100} \times 16800 \times \frac{1}{3} = 1008$

Indians who are married

$= \frac{82}{100} \times 16800 \times \frac{1}{4} = 3444$

Remaining unmarried foreign females visitors

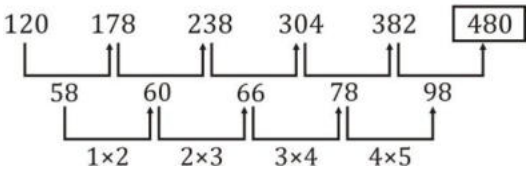
$= \frac{2016}{4} = 504$

Remaining Indian unmarried females visitors
$= \frac{10332}{3} = 3444$
∴ Required total females
$= \frac{1008}{2} + \frac{3444}{2} + 504 + 3444$
= 6174

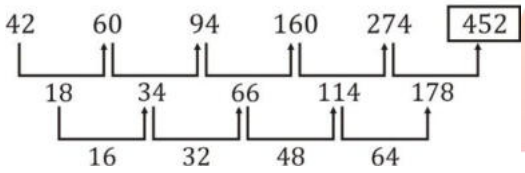
59. (c); Required ratio
$= \frac{\frac{3}{5} \times \frac{75}{100} \times 15000}{\frac{1}{6} \times \frac{18}{100} \times 16800}$
$= \frac{6750}{504} = 375 : 28$

60. (e); Required percentage $= \frac{\frac{15}{100} \times 18000}{\frac{75}{100} \times 15000} \times 100$
= 24%

61. (b); Pattern is



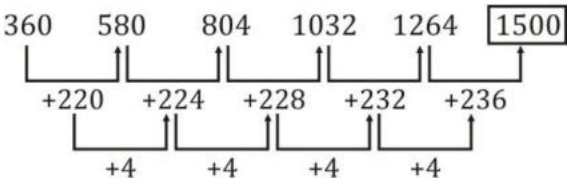
62. (d); Pattern is



63. (a); Pattern is,
8 × 0.25 + 2 = 4
4 × 0.5 + 4 = 6
6 × 1 + 8 = 14
44 × 4 + 32 = 208

64. (e); Pattern is
$+2^2+1,\ +3^2-1,\ +4^2+1,\ +5^2-1,\ +6^2+1$
∴ $104 + (6^2 + 1) = 104 + 37 = 141$

65. (b); Pattern is,



66. (c); Let CP of the 1000gm article = Rs 1000
SP of the 1000gm article(after marking up and giving discount) $= 1000 \times \frac{120}{100} \times \frac{90}{100}$
= 1080
After cheating his supplier, CP of 1100 gm = Rs 1000
⇒ CP of 1000 gm $= 1000 \times \frac{10}{11}$
After cheating his buyer or customer
SP of 900 gm = 1080
SP of 1000 gm $= \frac{1080}{9} \times 10 = 1200$
Profit % $= \frac{1200 - \frac{10000}{11}}{\frac{10000}{11}} \times 100$
= 32%

67. (c); Decrease in speed of train $\alpha \sqrt{No.\ of\ wagons\ attached}$
Decrease in speed of train = $K\sqrt{No.\ of\ wagons\ attached}$
Where k = proportionality constant
ATQ,
$24 - 20 = k\sqrt{4}$
$\frac{4}{2} = k \Rightarrow k = 2$
Number of wagons attached when speed is zero.
$\sqrt{No.\ of\ wagons\ attachment} = \frac{24}{2}$
No. of wagons attached = $(12)^2 = 144$
Max. No. of wagons that can be carried by the engine = 144 – 1 = 143

68. (d); Let original salary of person =x
ATQ,
x × 0.12 = (x + 4800) × 0.1
0.12x = 0.1x + 480
0.02x = 480
$x = \frac{480}{0.02} = 24{,}000$
Increased salary = 24,000 + 4800 = 28,800

69. (c); Ratio of concentration of wines = 10% : 20% : 30%
= 1 : 2 : 3
Mixing ratio = 2 : 3 : x

		1	: 2	: 3
×	(	2	: 3	: x
Resulting mixture =		2	: 6	: 3x

$\Rightarrow 2 + 6 + 3x = 23$
$\Rightarrow x = 5$

70. (a); CP of 1 kg rice = Rs 10
CP of 800 gm rice $= \frac{10}{1000} \times 800 = Rs\ 8$
SP of 1000 gm rice = 12
Profit percentage $= \frac{12-8}{8} \times 100$
$= \frac{4}{8} \times 100 = 50\%$

71. (b); **I.** $3x^2 - 35x + 100 = 0$
$3x^2 - 15x - 20x + 100 = 0$
$3x(x - 5) - 20(x - 5) = 0$
$(3x - 20)(x - 5) = 0$
$x = \frac{20}{3}, 5$

II. $5y^2 - 49y + 120 = 0$
$5y^2 - 25y - 24y + 320 = 0$
$5y(y - 5) - 24(y - 5) = 0$
$(5y - 24)(y - 5) = 0$
$y = \frac{24}{5}, 5$
$x \geq y$

72. (d); **I.** $2x - 15\sqrt{x} + 28 = 0$
$2x - 8\sqrt{x} - 7\sqrt{x} + 28 = 0$
$2\sqrt{x}(\sqrt{x} - 4) - 7(\sqrt{x} - 4) = 0$
$(2\sqrt{x} - 7)(\sqrt{x} - 4) = 0$
$\sqrt{x} = \frac{7}{2}, 4$
$x = \frac{49}{4}, 16$
II. $3y - 26\sqrt{y} + 56 = 0$
$3y - 12\sqrt{y} - 14\sqrt{y} + 56 = 0$
$3\sqrt{y}(\sqrt{y} - 4) - 14(\sqrt{y} - 4) = 0$
$(3\sqrt{y} - 14)(\sqrt{y} - 4) = 0$
$\sqrt{y} = \frac{14}{3}, 4$
$y = \frac{196}{9}, 16$
$y \geq x$

73. (c); **I.** $x^2 = 15^2 - 19^2 + 280$
$= 225 - 361 + 280$
$= 144$
$\Rightarrow x = \pm 12$
II. $y = \sqrt{529 - 289 - 71} = \sqrt{169}$
$y = 13$
$y > x$

74. (a); **I.** $2x^2 + 9\sqrt{3}x + 27 = 0$
$2x^2 + 6\sqrt{3}x + 3\sqrt{3}x + 27 = 0$
$2x(x + 3\sqrt{3}) + 3\sqrt{3}(x + 3\sqrt{3}) = 0$
$(2x + 3\sqrt{3})(x + 3\sqrt{3}) = 0$
$x = -3\sqrt{3}, -\frac{3\sqrt{3}}{2}$
II. $5y^2 + 36\sqrt{3}y + 192 = 0$
$5y^2 + 20\sqrt{3}y + 16\sqrt{3}y + 192 = 0$
$5y(y + 4\sqrt{3}) + 16\sqrt{3}(y + 4\sqrt{3}) = 0$
$(5y + 16\sqrt{3})(y + 4\sqrt{3}) = 0$
$y = -4\sqrt{3}, \frac{-16\sqrt{3}}{5}$
$x > y$

75. (b); **I.** $2x^2 - 41x + 210 = 0$
$2x^2 - 20x - 21x + 210 = 0$
$2x(x - 10) - 21(x - 10) = 0$
$x = 10, \frac{21}{2}$
II. $2y^2 - 39y + 190 = 0$
$2y^2 - 20y - 19y + 190 = 0$
$2y(y - 10) - 19(y - 10) = 0$
$y = 10, \frac{19}{2}$
$x \geq y$

76. (c); Let speed of man be x km/hr and that of current be **r** kmph.
$\frac{2}{x-r} = \frac{15}{60}$ or, $x - r = 8$ .....(i)
$\frac{2}{x+r} = \frac{10}{60}$ or, $x + r = 12$ .....(ii)
Solving (i) and (ii),
$x = 10, r = 2$
Required time $= \frac{2}{10-4} = \frac{2}{6} = \frac{1}{3}$ hr. $= \frac{1}{3}$ hr $= 20$ minutes

77. (a); Let speed of longer train be x and that of shorter train be y.
Then, $\frac{x+y}{x-y} = \frac{42}{21}$
or, $x + y = 2x - 2y$
or, $x = 3y$
or, $\frac{x}{y} = \frac{3}{1}$

78. (c); No. of ways $= {}^8C_5 \times {}^4C_2 + {}^8C_6 \times {}^4C_1 + {}^8C_7$
$= \frac{8\times7\times6}{3\times2} \times \frac{4\times3}{2} + \frac{8\times7}{2} \times 4 + 8$
$= 456$

79. (a); Area leveled by roller $= 400 \times 2 \times \frac{22}{7} \times \frac{0.42}{2} \times 1$
$= 528\ m^2$
Total cost $= 528 \times 100 =$ Rs. 52800

80. (e); For the biggest cube, face diagonal of cube = diameter of cylinder
$\sqrt{2}a = 30$
or, $a = 15\sqrt{2}$ But 'a' can't be greater than 20cm $\therefore$ $a = 20cm$
Volume $= a^3 = 20^3 = 8000\ cm^3$

ENGLISH LANGUAGE

81. (e); Refer the last few lines of the second paragraph "On the one hand, Ram Mohan bravely went against tradition by attempting to open up Vedic knowledge to all those who might be moved to seek it, irrespective of their social origin."

82. (d); Refer the first line of the passage "The early Orientalist movement and the rapid growth of English as the principal medium of instruction after the 1830s, considerably enhanced the educated Indian's familiarity with his tradition."

83. (d); Refer the first few lines of the second paragraph "The success of the printing press is also tied up with certain extremely important shifts that began to occur in the social and religious thinking of early nineteenth century Bengal."

84. (c); Refer the second sentence of the second paragraph "Hitherto, texts considered to be the most important in Hinduism had been zealously guarded by a class of Brahmins which prevented their wider circulation."

85. (c); Refer the first two sentences of the passage "The early Orientalist movement and the rapid growth of English as the principal medium of instruction after the 1830s, considerably enhanced the educated Indian's familiarity with his tradition. But, perhaps equally importantly, it also fostered a sense of shared culture."

86. (b); Refer the third last sentence of the first paragraph "Over time, the success of print-culture enormously increased the importance of written texts within a tradition that had hitherto greatly relied on orality."

87. (a); **Fostered** means encourage the development of (something, especially something desirable). Hence it has the similar meaning to **promoted**.

88. (b); Refer the first sentence of the second last paragraph "When a culture is in a state of disintegration or transition the freedom of the artist increases-but the question of subject matter becomes problematic for him: he, himself, has to choose for society."

89. (c); Refer the first paragraph of the passage.

90. (a); Refer the first two sentences of the fifth paragraph "Thus, for a painting to succeed it is essential that the painter and his public agree about what is significant. The subject may have a personal meaning for the painter or individual spectator; but there must also be the possibility of their agreement on its general meaning."

91. (a); Refer sixth paragraph for option (b), seventh paragraph for option (c) and last few lines of the fifth paragraph for option (d).

92. (a); Refer the second last paragraph of the passage "he, himself, has to choose for society……".

93. (e); Accrue means be received by someone in regular or increasing amounts over time. Hence it has an opposite meaning to dissipate.
Accost means approach and address (someone) boldly or aggressively.
Callous means showing or having an insensitive and cruel disregard for others.
Frost means freeze.

94. (e); Precede means come before in order or position. Hence it has the same meaning as antecedent.
Filiation means the fact of being descended or derived from something.

95. (c); Encouraged means give support, confidence, or hope to (someone). Hence it has the same meaning as invigorate.
Solicit means request
Inundate means overwhelm (someone) with things or people to be dealt with.
Ameliorate means make better.

96. (c); 'Since – exciting' is the correct use.
Since is used to express reason here

97. (b); 'located – havoc' is the correct use.
Havoc - widespread destruction.

98. (d); 'antiquated – almost' is the correct use.
Antiquated - old-fashioned or outdated.

99. (b); strategy – disabling' is the correct use.
Strategy- a plan of action designed to achieve a long-term or overall aim.

100. (d); 'essentially – bolster' is the correct use.
Bolster- to support or strengthen.

101. (a); Replace 'will be coming' by 'come' as the **clause** starting with "**when, if, before, after, in case, as long as, as soon as**" for future action takes **Simple Present Tense**.
e.g. **When** he **comes**, he will give me some money.
If you **work hard**, you will succeed.

102. (d); Replace 'invitation for' by 'invitation to' as Preposition **'to'** is used after **'invite'** or **'invitation'**.

103. (d); Remove 'to' before 'help' as '**offer'** is a Di-Transitive verb (verb which takes two objects). So object 'help' will be used after 'him' and not the infinitive 'to help'. e.g. I offered him a job. (Here, 'him' is an indirect object while 'a job' is a direct object.)

104. (b); Use 'Only' before 'he' as generally **'only' is used before that word which it signifies**.
e.g. **Only you** saw him.
You **only** saw him.
You saw **only him**.
In all these sentences, 'only' signifies different words.

105. (b); Use 'the' in place of 'a' as the word 'letter' is particularly specified i.e. **the letter which his wife had written.**
e.g. He gave me **the book which** he had bought in Delhi. [not 'a book']
For question (106-110): The correct sequence is **DEACB.**

106. (d); **107. (a);** **108. (a);**

109. (c); **110. (b);** **111. (c);**

112. (c); **113. (a);** **114. (b);**

115. (e);

116. (b); Verb 'depends' cannot be used since 'is' is there before 'still'.

117. (a); **118. (c);**

119. (d); 'outright' means straight and immediate.

120. (e); 'acrimonious' means angry and full of strong, bitter feelings, words, etc. 'Risk' is a noun, hence cannot be used here. 'detrimental, that means 'harmful' is the right answer.

Mock 50

RBI Assistant Mains 2016

REASONING ABILITY

Directions (1-5): In these questions two statements followed by two conclusions numbered I and II have been given. You have to take the two given statements to be true even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

Give answer:

(a) If neither conclusion I nor II is true
(b) If either conclusion I or II is true
(c) If only conclusions I is true
(d) If both conclusions I and II are true
(e) If only conclusion II is true

1. Statement: Some tasks are hurdles.
All hurdles are posts.
Some posts are works

Conclusions: **I.** All works being hurdles is a possibility
II. At least some works are tasks.

2. Statement: Some tasks are hurdles.
All hurdles are jobs.
Some jobs are works

Conclusions: **I.** Some jobs are tasks
II. All jobs are tasks

3. Statements: Some difficulties are solutions
No solution is a trick
All rules are tricks

Conclusions: **I.** No rule is a solution
II. Some difficulties are definitely not tricks

4. Statements: All M.L.A are deans.
Some deans are heads.
Some heads are principals

Conclusions: **I.** No principal is M.L.A
II. All heads being M.L.A is a possibility.

5. Statements: No queue is a graph
Some queues are rows.

Conclusions: **I.** No row is graph
II. All rows are graphs.

Directions (6-10): Study the following information carefully and answer the questions given below

There are seven friends L, Z, N, O, P, Q and T, each of them as pries to become something. Each of them likes different colours viz. Blue, Yellow, Green, Violet, Maroon, Black and Red but not necessarily in the same order. Each of them wants becomes Lawyer, Doctor, Engineer, Actor, Pilot, Army chief and Cricketer but not necessarily in the same order. P likes violet colour and wants to become a Doctor. N like Yellow colour and wants to become a cricketer. T does not like black colour and does not want to become an Engineer and Actor. The person, who likes maroon colour, wants to become an Actor, while the person who wants to be Pilot, likes blue colour. L likes red colour. Q does not like green or black colour and he does not want to become an Actor. O wants to become a Lawyer. Z does not want to become an Engineer or an Army chief.

6. Who does want to become an Army chief?
(a) Q (b) T (c) L
(d) Data inadequate (e) None of these

7. The person who wants to become a Lawyer likes which colour?
(a) Red (b) Green (c) Blue
(d) Data inadequate (e) None of these

8. T wants to become a/an?
(a) Army chief (b) Actor (c) Engineer
(d) Pilot (e) None of these

9. Who does like maroon colour?
(a) Z (b) Q (c) T
(d) Data inadequate (e) None of these

10. Which of the following combinations of Person-Colour-Profession is correct?
(a) O-Blue-Lawyer (b) L-Red-Cricketer
(c) Q-Blue-Pilot (d) Z-Green-Actor
(e) T-Maroon-Actor

Directions (11-15) : Study the following information to answer the given questions :

Twelve people are sitting in two parallel rows containing six people each, in such a way that there is an equal distance between adjacent persons. In row-1 L, M, N, O, P and Q are seated and all of them are facing South. In row-2 U, V, W, X, Y and Z are seated and all of them are facing North. Therefore, in the given seating arrangement each member seated in a row faces another member of the other row.

O sits third to right of M. Either O or M sits at an extreme end of the line. The one who faces M sits second to right of Y. Two people sit between V and Z. Neither V nor Z sits at an extreme end of the line. The immediate neighbour of V faces the person who sits third to left of L. N and P are immediate neighbours of each other. W sits second to the left of U. P does not face the immediate neighbour of X.

11. Who amongst the following sit at extreme ends of the rows ?
(a) O, X (b) Q, U (c) Q, W
(d) L, X (e) M, Z

12. How many persons are seated between Q and N?
(a) One (b) Two (c) Three
(d) Four (e) None

13. L is related to U in the same way as O is related to V based on the given arrangement. To which of the following is P related to, following the same pattern?
(a) W (b) X (c) Y
(d) Z (e) Cannot be determined

14. Which of the following is true regarding P ?
(a) Z faces P
(b) M is an immediate neighbour of P
(c) Z faces the one who is second to right of P
(d) P sits at one of the extreme ends of the line
(e) M sits second to the right of P

15. How many persons are seated between U and X ?
(a) One (b) Two (c) Three
(d) Four (e) None

Directions (16-20): In these questions, relationship between different elements is shown in the statements. The statements are followed by two conclusions. Give answer-
(a) If only conclusions I is true
(b) If only conclusions II is true
(c) If either conclusions I or II is true
(d) If neither conclusions I nor II is true
(e) If both conclusions I or II is true

16. Statements: $M \geq D > F, E > G \leq C = M$
Conclusions: **I.** $F < C$ **II.** $G < D$

17. Statements: $C = G < B \leq L > P = Z$
Conclusions: **I.** $Z < B$ **II.** $Z < L$

(18-20)

18. Statements: $M \leq N \leq P, M \geq T = L < X$
Conclusions: **I.** $L = N$ **II.** $T > N$

19. Conclusions: **I.** $X < N$ **II.** $T < P$

20. Statements: $N = O \geq Q, P = M < O \leq B$
Conclusions: **I.** $N < P$ **II.** $Q \leq N$

Directions (21-25): Each of the questions below consists of a question and three statements numbered I, II, III given below it. You have to decide whether the data provided in the statements are sufficient to answer the question.
(a) If statements I is sufficient to answer the question, but statement II by itself is not sufficient to answer the question.
(b) If statement II by itself is sufficient to answer the question, but statement I alone is not sufficient to answer the question.
(c) If statement either I or II is sufficient to answer the question.
(d) If both the statements I and II taken together are not sufficient to answer the question.
(e) If both the statements I and II taken together are sufficient to answer the question.

21. Who among P, Q, R, S and T each having a different age, is definitely the youngest?
I. Q is younger than T but not the youngest.
II. R is younger than only T and P.

22. On which date in November is definitely R's father's birthday?
I. R's sister correctly remembers that their father's birthday is after 16 but before 21st of November.
II. R is correctly remembers that his father's birthday is after 14th but before 19th November.

23. Towards which direction was Y facing after he stopped walking?
I. Y walked 20m towards west, took a left turn and walked 10m. He again took a left turn and stopped after walking 25m.
II. Y walked 25m towards east, took a right turn and walked 10m and he took a left turn and stopped walking 30m

24. How is TURN written in that code?
I. 'turn and go' is written as 'je ta ma'
II. 'go back and' is written as 'ta sa je'

25. How is K related to M?
I. M is the son of N, P is the husband of N.
II. R is married to K, K has 2 children P and Q. P is the father of M.

Directions (26-30): Study the following information carefully and answer the given questions.
Seven classes are scheduled to be held in a week, there is only one lecture on each of the seven days of the week, starting from Monday and ending on Sunday.
Chemistry class is either on Wednesday or on Saturday. Three classes are schedule to be held between Chemistry and English. Two classes are scheduled to be held between English and Computer. Class on Physics is scheduled on the day which is immediately next to the day when class on Biology is scheduled. Class on Psychology is scheduled to be held after Mathematics. Class on Psychology is not scheduled for Saturday or Sunday.

26. Which of the following classes is scheduled for Thursday?
(a) Mathematics (b) English (c)Physics
(d) Biology (e) Computers

27. Which of the following combinations of day- class is correct?
(a) Saturday-Physics (b) Monday-Biology
(c) Tuesday-English (d) Thursday-English
(e) Sunday-Computers

28. How many classes are scheduled between Chemistry and Physics?
(a) None (b) One (c) Two
(d) Three (e) Five

29. If Chemistry is related to Biology and Psychology is related is related to Computers in a certain way based upon the given lecture schedule, them Biology will be related to which of the following based upon the same relationship?
(a) English (b) Mathematics (c)Physics
(d) Chemistry (e) None of these

30. On which of the following day is the class on Psychology scheduled?
(a) Friday (b) Monday (c)Tuesday
(d) Thursday (e) None of these

31. Pointing to woman in the photograph, a man said, "Her brother is the only son of my wife's father." How is the woman in the photograph related to the man?
(a) Wife (b) Sister
(c)Sister-in-law (d) Either (a) or (c)
(e) None of these

Directions (32–33): Read the following information carefully and answer the question given below it.
'M + N' means 'M is the sister of N'.
'M = N' means 'M is the father of N'.
'M – N' means 'M is the mother of N'.
'M × N' means 'M is the brother of N'.
'M ÷ N' means 'M is the son of N'.
'M $ N' means 'M is the daughter of N'.
'M @ N' means 'M is the husband of N'.

32. Which of the following means L is the paternal uncle of F?
(a) L × M + N ÷ P @ Q – J – T =F
(b) L × M + N ÷ P @ Q – J × T = F
(c) F × M + N ÷ P @ Q – J × T = L
(d) L + M + N ÷ P @ Q – J × T = F
(e) None of these

33. How is K related to N according to the given sequence?
H –N × G + P ÷ T ÷ R @K
(a) Can't say (b) Grandfather
(c) Grandmother (d) Great-grandmother
(e) None of these

Directions (34-35): Answer the following questions referring to the symbol-letter-number sequence given below:
K F 5 L S 2 $ Z ✸ O M 1 N 3 G B I 9 D 6 Y 4 ~ J 7 E

34. Which of the following is exactly midway between the tenth element from the right and fifth element from the left end?
(a) O (b) M (c) 1
(d) ✸ (e) None of these

35. How many letters are there in the above sequence which are immediately preceded by a number and immediately followed by a consonant?
(a) None (b) one (c) Two
(d) Three (e) None of these

Directions (36-40): The following questions are based on the six words given below:
ROCK MOCK TONE FROM TURN EACH
(The new words formed after performing the operation mentioned may or may not necessarily be meaningful English words.)

36. If the first two letters in each of the words is changed to the next alphabet in the English alphabetical order, how many words having no vowel will be formed?
(a) Five (b) Four (c)Three
(d) Two (e) One

37. If the given words are arranged in the order as they would appear in a dictionary from right to left, which of the following will be the fourth from the left?
(a) TONE (b) ROCK (c) MOCK
(d) FROM (e) None of these

38. If in each of the words, all the alphabets are arranged in the reverse order of English alphabet within the word, how many words will not begin with a vowel?
(a) Three (b) Four (c) Five
(d) Six (e) None of these

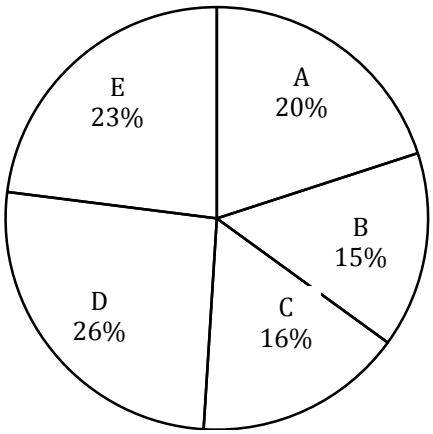
39. If in each of the given words, the first alphabet is changed to the previous letter in the English alphabetical order, how many words thus formed will be meaningful?
(a) One (b) Two (c) Three
(d) Four (e) None of these

40. If in each of the given words, first and third alphabets are interchanged and similarly second and fourth alphabets are interchanged, how many words thus formed will end with a vowel?
(a) Two (b) Three (c) Four
(d) Five (e) Six

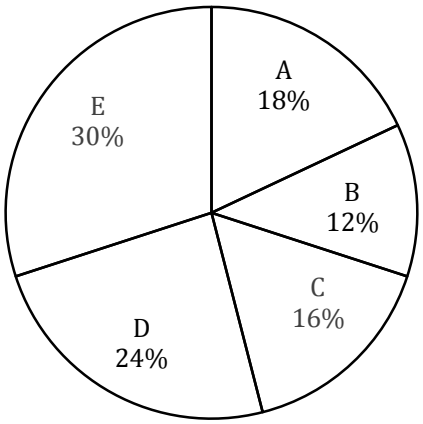
QUANTITATIVE APTITUDE

Directions (41-45): Following pie charts show the percentage distribution of males and females in five companies. Study the charts carefully to answer the questions that follow.

Distribution of males



Distribution of females



41. If ratio of between number of females to number of males in company B is 32 : 45 then number of males in company E is what percent more than the number of females in company C.(approx.)
(a) 53% (b) 62% (c) 65%
(d) 80% (e) 75%

42. If the average of total male and females of all the company together is 21000 and difference between male to female in company C is 320(no. of males > no. of females) then find the total females in company A.
(a) 3422 (b)3500 (c) 3420
(d) 2000 (e) none of these

43. Find the average of number of males in company D and company C and females in company B if ratio of total number of males to total number of females is 3:2 and number of males in the company D is 3900.
(a) 2500 (b) 1500 (c) 1600
(d) 1700 (e) 2600

44. If ratio between total females to total males is $x^3 : (x + 1)^2$ (x is a whole number), then find the minimum possible value of x, given that number of males in company A is 25% more than the number of females in the same company.
(a) 4 (b) 1 (c) 6
(d) 3 (e) 2

45. Ratio between average of number of male of company A, B and C to the average of number of females of company A, B and E is 51 : 65 then total females are how much percent more than total males.
(a) 8.45% (b) 7.34% (c) 7.14%
(d) 8.33% (e) 9.33%

Directions (46-50): In each question two equations numbered (i) and (ii) are given. You have to solve both the equations and give answer
(a) If $x < y$ (b) If $x > y$
(c) If $x \geq y$ (d) If $x \leq y$
(e) If $x = y$ or no relation can be established

46. (i) $4x^2 + 23x - 215 = 0$
(ii) $y^2 + 6y - 55 = 0$

47. (i) $8x^2 + 58x + 39 = 0$
(ii) $8y^2 - 14y - 15 = 0$

48. (i) $3x + 7y = 40$
(ii) $42x + 21y = 200$

49. (i) $5x^2 + 31x + 48 = 0$
(ii) $3y^2 + 27y + 42 = 0$

50. (i) $12x^2 + 109x + 240 = 0$
(ii) $9x^2 + 99y + 272 = 0$

51. In a square plot with 21 cm side a horse is tied at one corner of the square with rope which has length 2/3rd of the one side of square. Find the area which horse can graze when tied with the rope. [in cm^2]
(a) 154 (b) 164 (c) 144
(d) 184 (e) None of these

52. A committee of 5 people is to be formed among 4 girls and 5 boys. What is the probability that the committee will have less number of boys than girls?
(a) 3/14 (b) 7/13 (c) 3/5
(d) 5/14 (e) None of these

53. The average marks of Rahul decreased by 1 when he replaced the marks of Hindi in which he got 40 marks by two subjects in which he got 23 and 25 marks. Later he also included 57 marks of math due to which the average marks increased by 2. How many subjects were initially?
(a) 20 (b) 15 (c) 30
(d) 10 (e) None of these

54. Pipe A can fill an empty tank in 4 hours, while pipe B can fill it in 6 hours working separately. Pipe C can empty the whole tank in 4 hours. Bhavya opened the pipe A and B simultaneously to fill the empty tank. He wanted to adjust his alarm so that he could open the pipe C when it was half-filled, but he mistakenly adjusted his alarm at a time when his tank would be 3/4th filled. What is the time difference between both the cases, to fill the tank fully?
(a) 48 min. (b) 54 min. (c) 30 min.
(d) None of these (e) Can't be determined

55. Sarash calculates his profit percentage on the selling price whereas Prakash calculates his profit on the cost price. They find that the difference of their profit is Rs. 135. If the selling price of both are the same, and Sarash gets 30% profit and Prakash gets 25% profit, then find their selling price.
(a) Rs. 1250 (b) Rs. 1150 (c) Rs. 1450
(d) Rs. 1350 (e) None of these

56. Ram can do a piece of work in 60 days, and Shyam is 25% more efficient than Ram. If divya can do the same work in 32 more days than Shyam then find if all work together, work completed in how many days ?
(a) 24 days (b) 20 days (c) 30 days
(d) 25 days (e) None of these

57. 132ℓ mixture of milk and water, ratio of milk to water is 5 : 3, if 18 ℓ mixture taken out from the mixture, and same amount of water added in mixture then find the percentage of water in new mixture found ? (approx.)
(a) 42% (b) 43.3% (c) 46.02%
(d) 49.7% (e) 50.3%

58. If annually income of Aman is 7.8 lakh. He spend 20% of his monthly income of Rent and food, $\frac{1}{13}$ of remaining on clothes and 25% of remaining spend on Entertainment. If he distributed remaining income among his son, daughter and wife in ratio of 4: 3 : 5, then find the sum of money got by his son and wife ?
(a) 25000 (b) 31000 (c) 22000
(d) 27000 (e) None of these

59. Mayank borrowed Rs. 48000 from a bank at $12\frac{1}{2}$% per annum compound interest at the end of 1st, 2nd and 3rd year, he paid 14000, 13000 and 16000 respectively. If he wanted to clear his loan at the end of 4th year, what would he pay at the end of the third year to clear his loan ?
(a) 21000 (b) 22500 (c) 16800
(d) 26000 (e) None of these

60. There are 75 students in a class. They appeared in a Test, 20% of students were able to score 90 as average mark, 1/6 of remaining scored 10 as average marks, and remaining scored 55 as average marks. Find the average marks of the whole class ?
(a) 51 (b) 59 (c) 56
(d) 60 (e) None of these

Directions (61-65): What should come in place of the question mark (?) in the following number series?

61. 461 474 465 478 469 ?
(a) 460 (b) 482 (c) 456
(d) 478 (e) None of these

62. 18, 27, 9, 36, 0, ?
(a) 27 (b) 36 (c) 45
(d) 54 (e) 63

63. 482, 243, ?, 24.25, 9.85
(a) 75 (b) 78 (c) 80
(d) 81 (e) 84

64. 620, 632, 608, 644, 596, ?
(a) 536 (b) 556 (c) 656
(d) 646 (e) None of these

65. 120, 320, ?, 2070, 5195, 13007.5
(a) 800 (b) 920 (c) 850
(d) 900 (e) None of these

Directions(66-70): The following questions are accompanied by two statements (I) and (II),You have to determine which statement(s) is/are sufficient/necessary to answer the questions.

66. Kumud's mark in Geography are 20 more than the average marks obtained by him in English, History, Geography and Mathematics. What is the difference between the marks obtained by him in History and Mathematics?
I. Total marks obtained by him in Geography and History is 160
II. The total marks obtained by him in History, Geography and Mathematics is 210.
(a) Both I and II together are not sufficient
(b) Both I and II together are needed.
(c) Only I alone is sufficient.
(d) Only II alone is sufficient.
(e) Either I or II alone is sufficient.

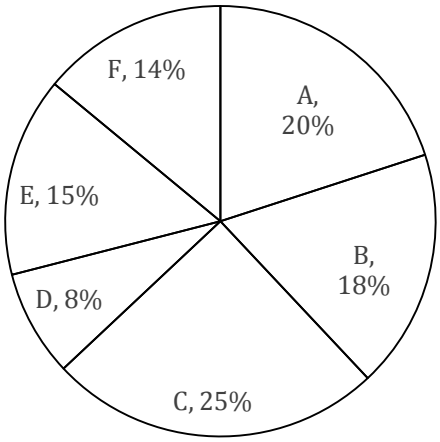
67. What is the minimum passing percentage in a test?
I. Raman scored 25% marks in the test and Sunil scored 288 marks which is 128 more than that of Raman.
II. Raman scored 64 marks less than the minimum assing marks.
(a) Both I and II together are not sufficient
(b) Both I and II together are needed.
(c) Only I alone is sufficient.
(d) Only II alone is sufficient.
(e) Either I or II alone is sufficient

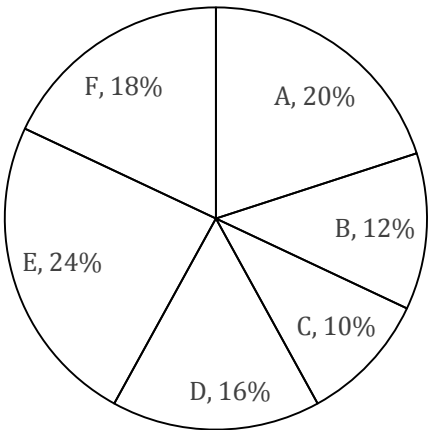
68. Whose body weight is second highest among the five boys Arun, Vinay, Suraj, Raju and Pratap?
I. Average weight of Arun, Suraj and Vinay is 68 kg and average weight of Raju and Pratap is 72 kg. Also Suraj is 78 kg. Raju is 68 kg and Vinay is 46 kg.
II. Average weight of Arun, Suraj, Vinay and Raju is 68 kg and also Suraj is 78 kg. Raju is 68 kg and Vinay is 46 kg. All of them have different weights.
(a) Both I and II together are not sufficient
(b) Both I and II together are needed.
(c) Only I alone is sufficient.
(d) Only II alone is sufficient.
(e) Either I or II alone is sufficient

69. What is the population of the city A?
I. The ratio of the population of males and females in city A is 27 : 23 and the difference between their population is 100000.
II. The population of city A is 80% of that of city B. The difference between populations of city A and city B is 312500.
(a) Both I and II together are not sufficient
(b) Both I and II together are needed.
(c) Only I alone is sufficient.
(d) Only II alone is sufficient.
(e) Either I or II alone is sufficient

70. How many students did participate in Singing?
I. The students who participated in dancing were 150% more than that who participated in Singing.
II. 150 students participated in dancing.
(a) Both I and II together are not sufficient
(b) Both I and II together are needed.
(c) Only I alone is sufficient.
(d) Only II alone is sufficient.
(e) Either I or II alone is sufficient

Directions (71-75): Pie chart given below shows number of laptops sold by six different sellers. First one shows total laptops sold and second one shows HP laptops sold. There are only two types of laptops one is H.P and another one is Lenovo. Study the data carefully & answer the following questions.
Total Laptops Sold = 12,000





HP Laptops sold = 4500

71. Which seller sold maximum number of Lenovo Laptops?
(a) D (b) B (c) A
(d) E (e) None of these

72. What is the ratio of Lenovo Laptops sold by B and D together to the HP laptops sold by D and E together.
(a) 30 : 31 (b) 31 : 30 (c) 27 : 31
(d) 31 : 27 (e) None of these

73. Lenovo laptops sold by C is what percent of the total laptops sold by him.
(a) 70% (b) 75% (c) 80%
(d) 85% (e) 90%

74. Lenovo laptops sold by A and E together is what percent of the total laptops sold by A and E together?
(a) $51\frac{6}{7}\%$ (b) $47\frac{1}{7}\%$ (c) $52\frac{6}{7}\%$
(d) $48\frac{1}{7}\%$ (e) $49\frac{1}{7}\%$

75. What will be the average number of Lenovo laptops sold by C, D and E together?
(a) 1260 (b) 1170 (c) 970
(d) 960 (e) 1160

76. If the volume and curved surface area of a cylinder 616 m^3 and 352m2 respectively, what is the total surface area of the cylinder (in m^2)?
(a) 429 (b) 419 (c) 435
(d) 421 (e) 417

77. A man borrows Rs. 4000 at 20% compound rate of interest. At the end of each year he pays back Rs. 1500. How much amount should he pay at the end of the third year to clear all his dues ?
(a) Rs. 2592 (b) Rs. 2852
(c) Rs. 2952 (d) Rs. 2953
(e) Rs. 2454

78. A pedestrian and a cyclist start simultaneously towards each other from Aurangabad and Paithan which are 40 km apart and meet 2 hours after they start. Then they resume their trips and the cyclist arrives at Aurangabad 7 hours 30 minutes earlier than the pedestrian arrives at Paithan. What of these could be the speed of the pedestrian ?
(a) 4 km/hr (b) 5 km/hr (c) 3 km/hr
(d) 6 km/hr (e) 7 km/hr

79. In an alloy, zinc and copper are in the ratio 1 : 2. In the second alloy the same elements are in the ratio 2 : 3. In what ratio should these two alloys be mixed to form a new alloy in which the two elements are in ratio 5 : 8?
(a) 7 : 11 (b) 3:10 (c) 5 : 11
(d) 9:11 (e) 7 : 10

80. To do a certain work B would take 4 times as long as A and C together and C would take 3 times as long as A and B together. The three men together complete the work in 5 days. How long would take B and C to complete the work ?
(a) $9\frac{1}{11}$ days (b) $11\frac{1}{9}$ days (c) $26\frac{2}{3}$ days
(d) $28\frac{3}{5}$ days (e)None of these

ENGLISH LANGUAGE

Directions (81-90): Read the following passage carefully and answer the questions given below it. Certain words are given in bold to help you locate them while answering some of the questions.

While electricity was the last general purpose technology to significantly affect manufacturing, recent information and communication technology innovations have **upturned** services. Much of the literature on technology and spatial development takes its clues from the US experience. But we still have a lot to learn in the context of India's services revolution. We examined how India's **spatial** development has evolved in some 600 districts in India using detailed enterprise data (Ghani, Ejaz & Grover, Arti & Kerr, William Robert, 2016. "Spatial Development and Agglomeration Economies in Services—Lessons from India").

Services account for many more of the larger establishments in India compared to manufacturing. Services are also much more urbanized than manufacturing. While large manufacturing firms are moving away from the urban core to the rural **periphery**, the same trend is not evident for organized services. Bigger states like Maharashtra and Tamil Nadu appear to have a higher share of large plants. Six states—West Bengal, Uttar Pradesh, Tamil Nadu, Andhra Pradesh, Gujarat, and Maharashtra—account for 60% of all enterprise plant counts, in both manufacturing and services.

While Union territories such as Delhi, Chandigarh, and Puducherry are the most urbanized, some medium-sized states such as Gujarat, Haryana and Tamil Nadu are experiencing increased urbanization in both manufacturing and services, whereas large states such as Madhya Pradesh have experienced an above-average urbanization in services but a below-average urbanization in manufacturing. With the exception of Gujarat, urbanization rates are much higher in services vis-à-vis manufacturing.

Both manufacturing and services show a **concentrated** industry composition. More than 80% of establishments in manufacturing belong to six industries: food products and beverages, tobacco products, textiles, apparel, wood and wood products, and furniture manufacturing. Within services, two industries, hotels and restaurants and land transport, contribute about half of the plant count. A few other services such as education and health services, financial intermediation, and other business services also feature prominently.

Within services, it is not surprising that computers and related activities record the highest usage of computers and internet, with the usage of new technologies in organized services always being considerably higher than that in unorganized services. Other organized services with high use of technology include financial intermediation, post and telecommunications, other business activities and supporting/auxiliary transport activities, and travel agencies. Education and health services also record a high usage of computers, but show lower internet usage.

Services establishments in richer states adopt technology somewhat more than those in poor ones, while those in urban areas have greater usage ratios than their rural **counterparts**.

81. How according to the passage, services are more urbanized than manufacturing?
(I) Services account for many more of the larger establishments in India compared to manufacturing.
(II) Unlike services, large manufacturing firms are moving away from the urban core to the rural edge.
(III) Urbanization rates are much higher in case of services than manufacturing.
(a) Only (I) is correct
(b) Both (I) and (II) are correct
(c) Both (II) and (III) are correct
(d) Both (I) and (III) are correct
(e) All are correct

82. Which of the following statements is/are correct regarding manufacturing sector?
(I) Food products and beverages, tobacco products, textiles, apparel, wood and wood products, and furniture manufacturing constitute almost 80% establishments in manufacturing.
(II) Bigger states like Maharashtra, Tamil Nadu and Madhya Pradesh have experienced an above average urbanization in manufacturing.
(III)Gujarat is the only state where the urbanization rate is higher in manufacturing than services.

(a) Only (I) is correct
(b) Only (II) is correct
(c) Both (I) and (III) are correct
(d) Both (II) and (III) are correct
(e) All are correct

83. Which of the following services require the high usage of technology?
(I) Post and telecommunications
(II) Financial intermediation
(III) Education and Health services
(IV) Travel Agencies
(a) Both (I) and (II)
(b) Both (II) and (IV)
(c) Only (I), (II) and (IV)
(d) Only (I), (II) and (III)
(e) All (I), (II), (III) and (IV)

84. Which of the following statements summarizes the passage in a better and most appropriate way?
(a) Services are more urbanized than manufacturing but they are not tied to big cities and thus raising the possibility of their being a growth driver that can promote inclusive spatial development.
(b) The possibility of a crowding-out phenomenon existing between manufacturing and services activity is not supported by the evidence from 600 districts.
(c) Although education does not have a positive influence on economic activity in manufacturing, it exhibits a positive and significant association with growth in services output.
(d) Both (a) and (b)
(e) None of the above

85. What is the author's style of writing the passage?
(a) Narrative (b) Analytical
(c) Descriptive (d) Argumentative
(e) Critical

Direction (86-88): Choose the word/group of words which is most similar in meaning to the word/group of words printed in bold as used in passage.

86. Spatial
(a) Foundational (b) Radical
(c) Elementary (d) Dimensional
(e) Constitutional

87. Counterpart
(a) Analogue (b) Interaction
(c) Bantam (d) Insignia
(e) Transcription

88. Concentrated
(a) Mutual (b) Condensed
(c) Strenuous (d) Critical
(e) Unyielding

Direction (89-90): Choose the word/group of words which is most opposite in meaning to the word/group of words printed in bold as used in passage.

89. Upturn
(a) Agitation (b) Plummet
(c) Optimization (d) Transpose
(e) Convulsion

90. Periphery
(a) Selvage (b) Frontier
(c) Ecliptic (d) Axial (e) Arsenal

Directions (91-95): Read the following passage carefully and answer the questions given below it. Certain words are given in bold to help you locate them while answering some of the questions.

During his fourth Independence Day address, Prime Minister Narendra Modi implored the youth to generate employment rather than just seek jobs. He listed out several initiatives of his government to facilitate entrepreneurship. These include access to credit, ease of getting clearances, and skill development. Modi also called for a collective resolve to build a "New India" by 2022. A secure, prosperous and strong nation cannot be built without providing every able-bodied individual an opportunity to create jobs. It appears that government initiatives on job creation are having limited impact. According to the Centre for Monitoring Indian Economy, 1.5 million jobs were lost during the first four months of 2017. Simultaneously, the number of people declaring themselves unemployed fell by 9.6 million. Seasonal jobs, demonetization, underemployment, reskilling, a reduction in investment, and a shift towards entrepreneurship, are being offered as explanations. If none of these is true, there is a danger of unemployed youth straying towards undesirable activities.

Consequently, there is a need for an urgent rethink on the strategy for creating job creators, while considering population control measures to regulate job seekers. Hitherto, an incremental silo-ed approach has been adopted. We have lacked a coherent and comprehensive strategy. To ensure that jobs are created on a large scale, we need to treat the freedom to create jobs on a par with other freedoms guaranteed under the Constitution. There is a need to recognize that all sectors, from commercial sex services to defence manufacturing, have the potential to generate direct and indirect employment. Unreasonable restrictions on practising one's calling must be dismantled. Personal inclination, and not regulatory provisions, must guide professional choices. These will also help in mainstreaming practices considered unlawful. According legal recognition to activities like commercial sex services, betting, and manufacturing medical marijuana (as suggested by Union minister Maneka Gandhi recently) will help in optimal regulation, prevent abuse, and enable access to medical and insurance facilities.

This will be no different from the government's approach to alcohol or tobacco—which are not banned in spite of known adverse impacts, but only regulated, thus letting consumers make the final choice. These avenues also bring in huge revenue which can be used for development projects.

Even today, close to half of the working population is engaged in agriculture, including tobacco production. Farmers have the potential to emerge as the largest direct and indirect job creators in the economy. A fundamental right to create jobs will aid in unshackling growth in key sectors like agriculture and allied activities, by repeal of restrictive policies and practices. Farmers will be able to demand their rightful access to land, capital, technology, markets, inputs, skills, remunerative pricing, and the government will be bound to oblige.

We have seen the impact of the rural employment guarantee scheme for quite some time now. While it has been a boon in times of distress, it might have diverted agriculture entrepreneurs to other occupations. Better sustainable results could have been achieved through supporting innovation and profitability enhancement in agriculture. The potential of a rural non-farm economy has also remained untapped in creating job creators. Due to lack of opportunities, the rural population is migrating to urban centres. However, if there is a fundamental right of job creation, then the divergence in delivery and quality of basic education, health and social service between urban and rural residents will be narrowed.

For instance, the Startup India programme is focused on information technology and related sectors, and restricted to urban centres. It should be replicated in rural areas, with a focus on the non-farm sector. If the infrastructure is in place, investments in retail will open opportunities along the agriculture value chain, including processing, packaging, warehousing and transportation. Rural job creators should be involved in these plans. For every smart city, a smart village or cluster will need to be created.

A digital economy aimed at curing asymmetry in information, finance and data can help in operationalizing the fundamental right to create jobs. The existing trinity of Jan Dhan accounts, Aadhaar and mobile can act as a stepping stone. Digital tools transmitted through mobile phones can aid in providing information about technology, markets and price. Expanding the direct benefits transfer programme can help in expanding access to finance. Informed consent to share Aadhaar-linked data, with adequate privacy protections, can aid in designing customized policies, products and services that cater to the needs of job creators, creating an ecosystem that stimulates job creation.

91. Why is the government encouraging the youth to create the jobs rather than to seek the jobs?

(I) As the government is incapable to provide jobs to each and every citizen of the nation.

(II) By providing opportunity to every capable individual of the nation to facilitate entrepreneurship, a strong nation can be built.

(III) As government initiatives like providing seasonal jobs, reskilling, etc. have limited impact, the government is imploring the youth to generate employment.

(IV)As the statistics shows that millions of jobs are lost and people are getting unemployed and are engaging themselves in undesirable activities, it is very important for the country to generate employment.

(a) Only (I) is true
(b) Only (IV) is true
(c) Both (II) and (IV) are correct
(d) Only (II), (III) and (IV) are correct
(e) All are correct

92. According to the passage, what should be done to promote job creation in the country?

(I) There is a need to demolish the unreasonable restrictions on practicing one's vocation or profession in which one customarily engages.

(II) We need to acknowledge that all sectors have the potential to generate direct and indirect employment.

(III) For ensuring the job creation on a large scale, we need to treat the freedom to create the jobs equal to other freedoms in the constitution.

(a) Only (I) is true
(b) Only (III) is true
(c) Both (I) and (III) are correct
(d) Both (II) and (III) are correct
(e) All are correct

93. Why, according to the passage, is the government not banning the production of alcohol or tobacco?

(a) As the farmers will get affected and will not be able to produce tobacco.
(b) As from their productions, the country is earning large revenues which can be used for various developmental projects.
(c) Farmers will not be able to demand their rightful access to land, capital, technology, markets, inputs, skills, remunerative pricing.
(d) Both (a) and (b) are correct.
(e) All of the above are correct.

94. Which of the following **theme** is correct in context of the passage?

(a) Government's initiative to generate employment
(b) Exploring the youth
(c) A fundamental right to create jobs.
(d) The need to create the job creators
(e) Developing the nation

95. How is it correct to say that digitization is catering to the needs of job creators?

(I) Digitization provides customized policies, products and services that fulfill the needs of job creators.

(II) Digitization brings investment to the nation and thus provides various opportunities to job creators to create new platform for generating employment.

(III) Digital tools like mobile phones are providing information about technology, markets and price which is beneficial to the job creators.

(a) Only (I) is true
(b) Only (III) is true
(c) Both (I) and (III) are true
(d) Both (II) and (III) are true
(e) All are correct

Directions (96–100): In each of the following questions given below there are two blanks, each blank indicates that something has been omitted. Choose the set of words for each blank which best fit into the meaning of the sentence.

96. Since the RTI Act has started _____ a lot of corrupt and arbitrary actions, there has been a great demand to increase the _____ of privacy.
(a) uncovering, limits
(b) discovering, obstacle
(c) concealing, liberation
(d) revealing, goal
(e) suppressing, margin

97. Country's largest lender State Bank of India has _____ interest on savings account deposits by 50 basis points to 3.5 per cent on balance up to Rs.1 crore, ahead of RBI's policy _____ this week.
(a) hacked, report
(b) mended, checkup
(c) sliced, survey
(d) slashed, review
(e) limited, study

98. The Union Cabinet has approved _____ in the Customs and Excise Act relating to abolition of cesses and surcharges on various goods and services to _____ implementation of GST.
(a) amendments, facilitate
(b) alteration, forward
(c) assistance, felicitate
(d) relief, sustain
(e) remission, promote

99. Lack of _____ of municipalities and district panchayats to _____ this enormous job and ineffective awareness campaigns by them have failed to bring about the desired results.
(a) space, promise
(b) capacity, undertake
(c) room, endeavor
(d) efficiency, initiate
(e) skill, embark

100. For around six months, well _____ sanitation campaigns were taken across the country, but on the ground, the excitement and photo-ops failed to make as much impact as was _____ for.
(a) broadcast, suspect
(b) declared, presumed
(c) dedicated, feared
(d) praised, regarded
(e) publicized, hoped

Directions (101–105): Sentences given in each question, when properly sequenced form a coherent paragraph. Each sentence is labeled with a letter. Choose the most logical order of sentences amongst the five choices given to construct a paragraph.

101.
A. Take the example of stents: After the NPPA slashed prices, there were genuine concerns that manufacturers in India would exit the field and there would be shortages at hospitals.
B. Today, the active pharmaceutical ingredient in many commonly used drugs and front-line medications come from China.
C. A recent report by the Boston Consulting Group and the Confederation of Indian Industry has flagged the risks of such dependence on Chinese imports and noted that any threat to the supply chain in China, as evidenced before the Beijing Olympics, could affect the manufacture of critical drugs.
D. Subsequent reports indicate that such a situation has been averted for the moment but there's no telling how this will unravel in the long term.
E. When the Drug Price Control Order (DPCO) was issued in 1995, it forced producers out of the Indian market.
F. Its successor, the DPCO 2013, has only served to encourage oligopolistic behaviour that almost always hurts consumers.

(a) ADEFBC (b) ACDEBF (c) CEDABF
(d) EDCABF (e) AEDBFC

102.
A. But what protects these embankments from angry tides? It's the mangroves.
B. Come monsoon, villages in the Sundarbans islands witness nature's fury with floodwaters overriding all boundaries and inundating huge tracts of land.
C. Mangroves serve as a shield for the embankments and provide natural defence against tidal waves and floods by reducing the energy of the waves hitting the coast.

D. As such, the earthen embankments, stretching to 3,600 kms on the 54 inhabited islands out of a total of 102 in the Sundarbans, protect scores of people from floods and tidal waves.
E. This move from the villagers is not surprising considering the destruction that cyclone Aila unleashed in the Sundarbans in 2009 is still fresh in their memory.
F. However, as changing climate patterns and anthropogenic pressure began to threaten the mangroves in the Sundarbans, 142 villages decided to take action.
G. They replanted around 25 million mangrove trees over 5,500 hectares.

(a) BCADEFG (b) BDEGFAC (c) CBDAEGF
(d) EBDCAGF (e) BDACFGE

103. **A.** By 1945, the United States, the most powerful nation, had begun flexing its muscle on every front, including trade.
B. The global hegemon is running amok.
C. And without its approval, no decision can come into effect.
D. That policy ensured a wild chase for markets starting with Cuba, the Philippines and then China in early 20th century.
E. It wants to capture markets by injecting fresh blood into the age-old "open door" policy that began in the late 19th century.
F. Effectively, it established the framework and rules for global trade.
G. Whether it is GATT (General Agreement on Tariffs and Trade that came into effect on 1 January 1948) or the World Trade Organization (WTO) that replaced GATT from 1 January 1995, it controlled almost everything.

(a) BACGEFD (b) FDBAEFG (c) GBDAEFC
(d) BEDAFGC (e) BDACFGE

104. **A.** If female labour participation is on a par with other industrial nations, Japan's per capita output would be higher by 4%.
B. The elderly will make up 40% of the total population by 2060, and the ratio of working to retired persons will be 1:1 by 2050.
C. Unless women participate in much greater numbers to expand the workforce, the pension and tax burden will be crushing, and will affect economic growth.
D. Female participation in Japan is lower by as much as 25% compared to males.
E. Female participation is crucial for Japan, since its population is declining and also ageing rapidly.
F. If this were on parity with males, then Goldman Sachs' estimates suggest Japan would gain eight million workers, and its gross domestic product (GDP) would be higher by 14%.

(a) EBCADF (b) ABCDFE (c) EDCAFB
(d) CBEFAD (e) EFDCAB

105. **A.** The absence of the indigenization plan makes the first opening for import that is exploited by various interest groups who profit from foreign purchases.
B. In contrast, there is not a single comprehensive indigenization plan document which would make the MoD accountable to its self-reliance commitment.
C. Self-reliance in defence procurement has always been an avowed objective of Indian policy makers since the country's independence.
D. This is very much evident in the ministry of defence's (MoD) approach to defence acquisition on which billions of dollars are spent every year.
E. Within the MoD, there are numerous plan documents, apart from dedicated hierarchical structures, for procurement.
F. However, the objective is yet to be translated into a concrete plan of action.

(a) ABDCEF (b) CADFEB (c) CFDEBA
(d) EDFCAB (e) AEDFCB

Directions (106-110): Which of the phrases (a), (b), (c) and (d) given below each sentence should replace the phrase printed in **bold** letters to make the sentence grammatically correct? If the sentence is correct as it is, mark (e) i.e., "No correction required" as the answer.

106. With democratic practices evolving over time, even the power to punish for contempt vested in the judiciary has come under question, **with many wonder whether this relic of** a bygone age should be retained.
(a) wondering that whether this is a relic of
(b) as many wonder whether this is a relic of
(c) with many wondering whether this relic of
(d) as many wondering whether this relic of
(e) No improvement required

107. It is a matter of concern that the ECI appears to be preparing the ground to use its power to curtail free speech; its letter refers to some parties "taking advantage of the right to freedom of expression" **so as to question the conduct of elections.**
(a) to question the conduct of elections.
(b) questioning the conduct of elections.
(c) so as to question the conduction of election.
(d) by questioning the conduct of elections.
(e) No improvement required

108. **Not stopped with scepticism of the claim** that the electronic voting machines are invulnerable, it has alleged ECI members are politically aligned to the ruling party at the Centre.
(a) With not stopped with scepticism of the claim
(b) Not stopping with scepticism of the claim
(c) By not stopping with scepticism of the claims
(d) No such stopping with scepticism of the claim
(e) No improvement required

109. There are also religious issues: Pakistan accused the two Chinese nationals, **that obtained business visas to teach Mandarin** and learn Urdu, of being involved in Christian "missionary work", which is unlawful in the country.
(a) having obtaining business visas to teach Mandarin
(b) who have obtained the business to teach Mandarin
(c) obtaining business visas to teach Mandarin
(d) who had obtained business visas to teach Mandarin
(e) No improvement required

110. While it is important to observe the progress of CPEC closely, **continuing to raise India's concerns on sovereignty** with China and Pakistan, it is premature to attach too much lasting significance to the kidnappings in Balochistan.
(a) with continue to raise India's concerns on sovereignty
(b) in continuation to raise India's concerns over sovereignty
(c) and continue to raise India's concerns on sovereignty
(d) and in continuation to raise India's concerns on sovereignty
(e) No improvement required

Directions (111-115): In each of the following questions, various sentences are given and you have to choose the one which has some or any grammatical error in it. In the questions where option (e) is all are correct and all the sentences are grammatically correct choose option (e) as the correct choice.

111. (a) His absence was the opportunity for the conspirators, and they destroyed our letters.
(b) Being very often ill and frequently absent, he had no opportunity to finish his work or do much of it in fact.
(c) But I never ask questions too quickly, and this time there was no opportunity.
(d) I wanted to become a professional, but because of my financial situation there were no opportunities.
(e) All are correct.

112. (a) Mathematics is the only discipline which could be taught under that rule.
(b) Nature without discipline is of small force, and discipline without nature more feeble.
(c) But how many planters could be expected to have the principle or patience to carry out such a course of discipline?
(d) The sergeant disciplined the recruits to become soldiers.
(e) All are correct.

113. (a) The captain declared that his ship had carried no less than three hundred passengers on the last voyage.
(b) They dragged me out into the field and made me carry all the pails.
(c) They would have carried the road ten miles further, but ran out of materials.
(d) It will not burn, and it will not carry heat to make other things burn.
(e) The builders are going to carry the chimney through the roof.

114. (a) I left the station-master's office, and found the poor Alsatian waiting at the door.
(b) An example of being on the political left is a pro-choice person.
(c) Jonathan was playing cars with Destiny in the family room floor while Carmen straightened up the clutter left by so many people.
(d) He left playing, after his accident.
(e) You left your immigration problems to sentimentalists and money-makers.

115. (a) It is a pity that a son born from very good parents should live a life of misery and deprivation of the worst order.
(b) Ben looked at this young gentleman from Chicago in surprise, and then in pity.
(c) Her last waking thoughts (and they were very late) were of pity and of prayer.
(d) An office worker pitied his confinement and slipped in to give him a loaf of bread.
(e) All are correct.

Directions (116-120): Each of the following questions has a paragraph from which one sentence has been deleted. From the given options, choose the one that completes the paragraph in the most appropriate way.

116. Ever since Penicillin was discovered by Alexander Fleming in 1929, an "antibiotic revolution" has been ushered in medicine with new antibiotics flooding the market every year. _____.The only way in which antibiotic resistance can be prevented is not to use the antibiotic, which, of course, is not possible. Preventing resistance against Bedaquiline is a must, but the manner in which this is being done is impractical and undemocratic.
(a) But there is hardly any antibiotic against which "no resistance" has been reported.
(b) The rationing of Bedaquiline by the government on the fears of drug resistance is understandable.

(c) If the priority is prevention of drug resistance, it could be attained by methods less draconian than controlling the availability of the drug.
(d) A compassionate approach supplemented by scientific rationality is a must in promoting, not rationing, Bedaquiline therapy.
(e) Restricting patients and means to treat them in specific regions is unprecedented.

117. It is clear that institutional credit availability to facilitate rural consumption and growth has been on the wane, with larger household debts being incurred through non-institutional sources, borrowed at very high rates of interest for unproductive purposes. While international studies point to the negative long-run impact of household debt on consumption and growth, such debt-driven consumption as prevalent in India is likely to be even more unsustainable, and non-growth-inducing(_____)The success of monetary policy and the transmission mechanism would be predicated on the successful reach of institutional credit agencies in rural areas and their growing share in rural household debt.
(a) The presence of the right institutional environment will have a bearing on the sustainability of household debt.
(b) Monetary policy will need to pay attention to this link between consumption and growth.
(c) While the Economic Survey and the budget document have raised concerns about corporate debt and government debt, growing household debt may be the blind spot.
(d) Economic analysts, as also the monetary authorities, may need to go beyond their traditional obsession with the growth-inflation outcomes of monetary policy to the underlying conundrums of such growth itself.
(e) More important is the declining role of cheaper institutional credit in the total cash debt in rural segments, vis-à-vis the exploitative traditional sources of non-institutional credit such as agricultural moneylenders, landlords, traders, etc.

118. One form of child-centrism is articulated by the American philosopher, John Dewey, who argued that the school curriculum has to be "psychologised". One has to start from the child, her experiences and her understanding, but then, this has to constantly look at accepted human knowledge and understanding._____. Without the end in view, the starting point is of no value. In fact, there can be no justification for taking this or that starting point without reference to an end point.
(a) This is an argument that cannot be dismissed summarily.
(b) But exactly what do we mean by child-centrism in India?
(c) One is the starting point, the other the end.
(d) Or that they should be left free to discover knowledge?
(e) This demands freedom, flexibility and contextual decision-making by the teacher, keeping in mind every individual child.

119. The Economic Survey asks: "What went wrong?" and offers the following explanation: In the 2000s, "economies all over the world were booming", Indian firms "made plans accordingly. _____. Naturally, "projects that had been built around the assumption that growth would continue at double-digit levels were suddenly confronted with growth rates half that level". Firms stopped investing and banks, mostly public, which have accumulated a huge amount of bad loans, stopped lending. The growth of credit to industry became negative during the last fall, making SMEs suffer even more than big companies.
(a) They launched new projects worth lakhs of crores", their "investment financed by an astonishing credit boom".
(b) Growth remains high at 7.2 per cent, but its rate is declining and its composition is worrying.
(c) Certainly, there was some good news.
(d) Most economic problems were resolved through market-based mechanisms.
(e) These reforms have not really taken place yet, according to the Economic Survey.

120. Perhaps, the lack of simple fact check and critical thinking is also how regressive notions still find their way into secondary and graduate level textbooks. Recently a Maharashtra State textbook informed students that "ugly" and "handicapped" girls may need more dowry to be married, followed by no attempt to question the posited thought. BA Sociology textbooks still unflinchingly state that the primary goal of Hindu marriage is putraprapti, or reproduction of sons. _____– and yet these outdated ideas are propagated unquestioned, with textbook dignity afforded to them. Students memorize and reproduce them in exams. These follies are compounded by the fact that questioning is still relatively discouraged in classrooms.
(a) This would instill them with 'femininity' that would ostensibly keep their thinking undistorted for future reproductive performance
(b) It enfeebles real progressive development
(c) This is the justification provided to segregate the male and female students in the college canteen
(d) Science wise, there is baffling nonsense in this statement
(e) The nation is supposedly trying to do away with these social ills

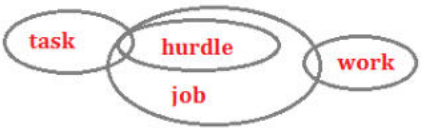
Solutions

REASONING ABILITY

Directions (1-5):

1. (c);

2. (c);



3. (d);

4. (e);

5. (a);

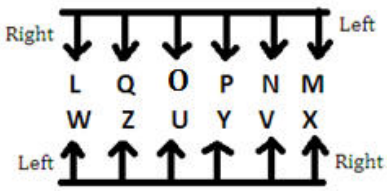
Directions (6-10):

Person	Colour	Profession
L	Red	Engineer
Z	Maroon	Actor
N	Yellow	Cricketer
O	Black	Lawyer
P	Violet	Doctor
Q	Blue	Pilot
T	Green	Army Chief

6. (b); 7. (e); 8. (a);

9. (a); 10. (c);

Directions (11-15):



11. (d); 12. (b); 13. (b);

14. (c); 15. (b);

Directions (16-20):

16. (a); I. F < C (True) **II.** G < D (False)

17. (b); I. Z < B (False) **II.** Z < L (True)

18. (d); I. L = N (False) **II.** T > N (False)

19. (d); I. X < N (False) **II.** T < P (False)

20. (b);I. N < P (False) **II.** Q ≤ N (True)

Directions (21-25):

21. (e); 22. (d); 23. (c);

24. (e); 25. (d);

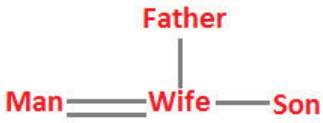
Directions (26-30):

26. (e);

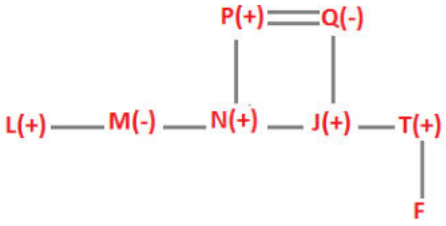
ay	Subject
Monday	Mathematics
Tuesday	Psychology
Wednesday	Chemistry
Thursday	Computer
Friday	Biology
Saturday	Physics
Sunday	English

27. (a); 28. (c); 29. (a);

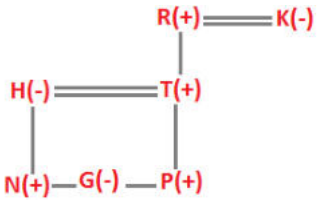
30. (c); 31. (d);



32. (b);



33. (c);



34. (b);

35. (c); 5LS ,3GB

36. (c); After rearrangement, First two letter of each words change to next alphabet in English alphabetical order, they become-
SPCK NPCK UPNE GSOM UVRN FBCH
We can see that **SPCK NPCK FBCH** words have no vowel.

37. (c); After rearranging all the word , we have –
TURN TONE ROCK MOCK FROM EACH
4th from the left is **MOCK**.

38. (b); After rearranging all the alphabets in reverse order of English alphabet, they become-
ROKC OMKC **TONE ROMF** UTRN **HECA**
We can see that OMKC and UTRN Words are begin with vowel, So here Four words are not begin with vowel.

39. (a); After rearrangment,1st alphabet of each words change to previous letter, they become-
QOCK LOCK SONE EROM SURN DACH
The meaningful word is **LOCK**

40. (d); After rearrangement,1st and 3rd alphabets are interchanged and 2nd and 4th alphabets are interchanged in each word, they become-
CKRO CKMO NETO OMFR **RNTU CHEA**
We can see that there are five words end with vowel

QUANTITATIVE APTITUDE

41. (b); Let total no. of males = x
Total no. of females = y
ATQ,
$\frac{12 \times y}{100} \times \frac{100}{15 \times x} = \frac{32}{45}$
$\frac{y}{x} = \frac{8}{9}$
Number of males and females 8a, 9a
No. of males in E → $\frac{23 \times 9a}{100} = 2.07a$
No. of females in C = $\frac{16 \times 8a}{100} = 1.28a$
Required % = $\frac{0.79a}{1.28a} \times 100 \approx 62\%$

42. (e); Total males and females = 21000 × 2 = 42000
Now let total no. of males is 'x' and total no. of females is 'y'
ATQ,
$\frac{16 \times x}{100} - \frac{16 \times y}{100} = 320$
x – y = 2000 ...(i)
x + y = 42000 ...(ii)
Solving (i) and (ii)
x = 22000
y = 20000
$Female\ in\ company\ A = \frac{18 \times 20000}{100}$
$= 3600$

43. (a); Total no. of males = $\frac{3900 \times 100}{26} = 15000$
Total no. of females = $\frac{15000 \times 2}{3} = 10{,}000$
Required average = $\frac{3900 + 2400 + 1200}{3} = 2500$

44. (e); Let number of females in company A = 4y
So, number of males in company A = 5y
Total number of males = $\frac{5y}{20} \times 100 = 25y$
Total number of females = $\frac{4y}{18} \times 100 = \frac{200}{9}y$
ATQ,
$\frac{200y}{9 \times 25y} = \frac{x^3}{(x+1)^2}$
$\frac{8}{9} = \frac{x^3}{(x+1)^2}$
Value of x = 2

45. (d); Let total no. males = x
Total no. of females = y
So, average no. of male in company A, B and C
$= \frac{(20 + 16 + 15)x}{100 \times 3} = \frac{17x}{100}$
Average no. of females of company A, B and E
$= \frac{(18 + 12 + 30)y}{100 \times 3} = \frac{20y}{100}$
Ratio →
$\frac{17x}{100} : \frac{20y}{100} = 51 : 65$
$\frac{x}{y} = \frac{12}{13}$
Required percentage = $\frac{1}{12} \times 100 = 8.33\%$

46. (e); (i) $4x^2 + 23x - 215 = 0$
$4x^2 + 43x - 20x - 215 = 0$
X (4x +43) –5 (4x + 43) = 0
(x – 5) (4x + 43) = 0
x = 5, (–43)/4
(ii) $y^2 + 6y - 55 = 0$
$y^2 + 11y - 5y - 55 = 0$
y (y + 11) – 5 (y + 11) = 0
(y + 11) (y – 5) = 0
y = 5, – 11
No relation.

47. (d); (i) $8x^2 + 58x + 39 = 0$
$8x^2 + 52x + 6x + 39 = 0$
$4x(2x + 13) + 3(2x + 13) = 0$
$x = (-13)/2, (-3)/4$
(ii) $8y^2 - 14y - 15 = 0$
$8y^2 - 20y + 6y - 15 = 0$
$4y(2y - 5) + 3(2y - 5) = 0$
$y = 5/2, (-3)/4$
$y \geq x$

48. (a); (i) $3x + 7y = 40$
$42x + 21y = 200$
$x = \frac{80}{33}, y = \frac{360}{77}$
$y > x$

49. (e); (i) $5x^2 + 31x + 48 = 0$
$5x^2 + 15x + 16x + 48 = 0$
$5x(x + 3) + 16(x + 3) = 0$
$x = -3, (-16)/5$
(ii) $3y^2 + 27y + 42 = 0$
$3y^2 + 21y + 6y + 42 = 0$
$3y(y + 7) + 6(y + 7) = 0$
$y = -7, -2$
Relation cannot be established

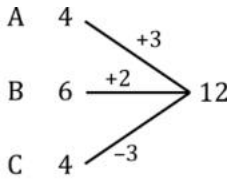
50. (c); (i) $12x^2 + 109x + 240 = 0$
$12x^2 + 64x + 45x + 240 = 0$
$4x(3x + 16) + 15(3x + 16) = 0$
$x = (-15)/4, (-16/3)$
(ii) $9x^2 + 99y + 272 = 0$
$9y^2 + 51y + 48y + 272 = 0$
$3y(3y + 17) + 16(3y + 17) = 0$
$y = (-17)/3, (-16)/3$
$x \geq y$

51. (a); Size of rope $= \frac{2}{3} \times 21 = 14$ cm
∴ Area which horse can graze
$= \frac{\pi r^2}{4} = \frac{22}{7} \times \frac{14}{4} \times 14 = 154\ cm^2$

52. (d); There are two cases
1st case:
1 boy and 4 girls
probability $= \frac{{}^5C_1 \times {}^4C_4}{{}^9C_5} = \frac{5}{126}$ .. (i)
2nd case:
2 boys & 3 girls
Probability $= \frac{{}^5C_2 \times {}^4C_3}{{}^9C_5} = \frac{40}{126}$ ... (ii)
Adding equation (i) and (ii)
Required probability $= \frac{5}{126} + \frac{40}{126} = \frac{45}{126}$
$= \frac{5}{14}$

53. (b); Let the number of subject initially be n and the initial average be 'a'
∴ $na - 40 + 23 + 25 = (a-1)(n+1)$
$\Rightarrow a - n = 9$ .... (i)
Also,
$na + 8 + 57 = (a + 1)(n + 2)$
$\Rightarrow na + 65 = na + 2a + n + 2$
$\Rightarrow 2a + n = 63$ ...(ii)
In solving (i) & (ii)
a= 24 & n = 15

54. (b);



Case I: Time taken to fill the tank when pipe C was opened when tank was half filled
$\frac{6}{5} + \frac{6}{2} = \frac{21}{5}$
Case II: Time taken to fill the tank when pipe C was opened when tank was 3/4th filled
$\frac{9}{5} + \frac{3}{2} = \frac{33}{10}$
∴ Difference in time taken to fill the tank in two cases $= \frac{21}{5} - \frac{33}{10}$
$= \frac{9}{10}$ hours
$= 54$ mins.

55. (d);

	C.P.	S.P.		
Sarash	70	$100_{\times 5}$	350	500
Prakash	100	$125_{\times 4}$	400	500

Difference of their profit $= 150 - 100 = 50$
∴ $50 \rightarrow 135$
$500 \rightarrow \frac{135}{50} \times 500 = 1350$ Rs.

56. (b); Ram – 60 days
Ram : Shyam = 100 : 125
= 4 : 5
Total work = 60 × 4 = 240
$Shyam = \frac{240}{5} = 48$
Divya = 48 + 32 = 80 days
$Divya\ efficiency = \frac{240}{80} = 3$
$(Ram + Shyam + Divya) = \frac{240}{(4+5+3)}$
$= \frac{240}{12} = 20\ days$

57. (c); Given, mixture = 132 ℓ
Milk : water = 5 : 3
Quantity of milk in mixture
$= 132 \times \frac{5}{8} = 82.5\ \ell$
Quantity of water in mixture
$= 132 \times \frac{3}{8} = 49.5\ \ell$
Quantity of milk and water in 18ℓ mixture which taken out
$Milk = 18 \times \frac{5}{8} = 11.25\ \ell$
$Water = 18 \times \frac{3}{8} = 6.75\ \ell$

New Quantity of milk and water
Milk = 82.5 – 11.25 = 71.25
Water = 49.5 – 6.75 + 18 = 60.75
Percentage of water in New mixture
$= \frac{60.75}{(71.25+60.75)} \times 100$
$= \frac{60.75}{132} \times 100$
$= 46.02\ approx$

58. (d); $Aman\ monthly\ income = \frac{7.8}{12}$
$= 65000\ Rs.$
$(Food\ +\ Rent) = 65000 \times \frac{20}{100} = 13000$
Remain = 65000 – 13000 = 52000
Cloth + Entertainment
$= 52000 \times \frac{1}{13} + \left(52000 - 52000 \times \frac{1}{13}\right) \times \frac{25}{100}$
$= 4000 + 48000 \times \frac{25}{100}$
$= 4000 + 12000$
= 16000
Remaining = 52000 – 16000 = 36000
Son : Daughter : Wife
$= 36000 \times \frac{4}{12} : 36000 \times \frac{3}{12} : 36000 \times \frac{5}{12}$
= 12000 : 9000 : 15000
Son + Wife = (12000 + 15000) = 27000

59. (b); 1st year CI
$48000 \times \frac{1}{8} = 6000$
Amount = 48000 + 6000 = 54000
2nd year principle = 54000 – 14000 = 40000
2nd year CI =
$40000 \times \frac{1}{8} = 5000$
Amount = 40000 + 5000 = 45000
3rd year principle
= 45000 – 13000 = 32000
3rd year CI
$= 32000 \times \frac{1}{8} = 4000$
Amount = 32000 + 4000 = 36000
4th year principle = 36000 – 16000 = 20000
At the end of 4th year amount
$= 20000 \times \frac{1}{8} + 20{,}000$
= 2500 + 20000 = 22500

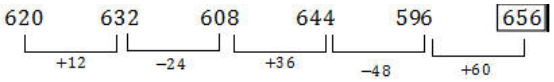
60. (c); Total average scored by all 75 students
20% of 75 student total score
$= \frac{75 \times 20 \times 90}{100} = 1350$
Remain student = 75 – 15 = 60
$= 60 \times \frac{1}{6} \times 10 = 100$
Remain = (60 – 10) = 50
= 50 × 55 = 2750
$Total\ average = \frac{(1350+100+2750)}{75}$
$= 56$

61. (b); The pattern is:
461 + 13 = 474
474 - 9 = 465
465 + 13 = 478
478 - 9 = 469
469 + 13 = 482

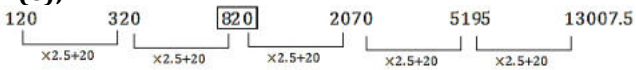
62. (c); Pattern is +9×1, -9×2, +9×3, -9×4, +9×5

63. (e); $\div 2 + 2, \div 3 + 3, \div 4 + 4, \div 5 + 5$

64. (c);



65. (e);



66. (a); Both the statements are not sufficient

67. (b); If the max marks of exam = x
Raman $= \frac{x}{4}$
$\Rightarrow \frac{x}{4} = 288 - 128 = 160$
$x = 640$
$\therefore$ Minimum passing marks $= 160 + 64 = 224$
Required %= $\frac{224}{640} \times 100 = 35\%$

68. (c); From I,
A + S+ V = 3 × 68 = 204 kg
R + P = 144 kg
A ⇒ 204 – 46 – 78 = 80 kg
P ⇒ 144 – 68 = 76 kg
S = 78 kg

69. (e); From I
$27x - 23x = 100000$
$x = 25000$
Population of city A = 50x
$= 1250000$
From II
Population of city B = x
Population of city A = $\frac{4x}{5}$
$x - \frac{4x}{5} = 312500\ x = 1562500$
Population of city A = $\frac{4}{5} \times 1562500$
$= 1250000$

70. (b); From I and II
Students participating in dance = 150
$Students\ who\ participate\ in\ singing$
$= \frac{150 \times 100}{250} = 60$

Sol- (71-75): Total laptops sold by A = $12000 \times \frac{20}{100}$
$= 2400$
Total laptops sold by B $= 12000 \times \frac{18}{100} = 2160$
Total laptops sold by C $= 12000 \times \frac{25}{100} = 3000$
Total Laptops sold by D $= 12000 \times \frac{8}{100} = 960$

Total Laptops sold By E $= 12000 \times \frac{15}{100} = 1800$
Total Laptops sold by F $= 12000 \times \frac{14}{100} = 1680$
HP Laptops sold by A $= 4500 \times \frac{20}{100} = 900$
HP Laptops sold by B $= 4500 \times \frac{12}{100} = 540$
HP laptops sold by C $= 4500 \times \frac{10}{100} = 450$
HP Laptops sold by D $= 4500 \times \frac{16}{100} = 720$
HP laptops sold by E $= 4500 \times \frac{24}{100} = 1080$
HP laptops sold by F $= 4500 \times \frac{18}{100} = 810$
Lenovo Laptops sold by A = 2400 – 900 = 1500
Lenovo Laptops sold by B = 2160 – 540 = 1620
Lenovo Laptops sold by C =3000 – 450 = 2550
Lenovo Laptops sold by D = 960 – 720 = 240
Lenovo Laptops sold by E = 1800 – 1080 = 720
Lenovo Laptops sold by F = 1680 – 810 = 870

Sellers	Total Laptops Sold	HP Laptops sold	Lenovo Laptops Sold
A	2400	900	1500
B	2160	540	1620
C	3000	450	2550
D	960	720	240
E	1800	1080	720
F	1680	810	870

71. (e); 'C' sold maximum number of Lenovo Laptop

72. (b); Required ratio $= \frac{1620+240}{720+1080} = \frac{1860}{1800} = \frac{31}{30}$

73. (d); Required % $= \frac{2550}{3000} \times 100 = 85\%$

74. (c); Required % $= \frac{1500+720}{2400+1800} \times 100$
$= \frac{2220}{4200} \times 100 = 52\frac{6}{7}\%$

75. (b); Required average $= \frac{2550+240+720}{3} = \frac{3510}{3}$
$= 1170$

76. (a); $\frac{\pi r^2 h}{2\pi r h} = \frac{616}{352}$
$r = 3.5$ m
$\pi r^2 h = 616$
$h = \frac{616}{11\times 3.5} = 16$ m
Total S.A. $= 2\pi r h + 2\pi r^2$
$= 2\pi r(h + r)$
$= 2 \times \frac{22}{7} \times 3.5(3.5 + 16)$
$= 429\ m^2$

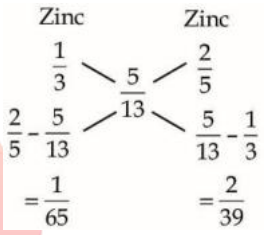
77. (c);

Amount	4000
At end of 1st year	4000 + 800 = 4800
Amount	4800 – 1500 = 3300
At the end of 2nd year	3300 + 660 = 3960
Amount	3960 – 1500 = 2460

Amount to be paid at the end of third year = 2460 + 492 = 2952

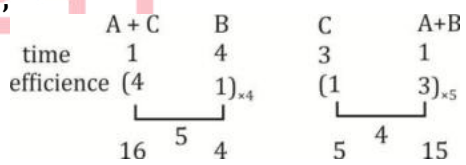
78. (a); Let
Sped of pedestrian $= x$ km/h
Speed of cyclist $= y$ km/h
$\therefore 2 \times (x + y) = 40$
$\Rightarrow$ x + y = 20 km/h
According to second condition,
$\frac{40}{x} - \frac{40}{y} = \frac{15}{2}$
Now, going through options we get x = 4 km/hr.

79. (b);



Required ratio $= \frac{\frac{1}{65}}{\frac{2}{39}} = \frac{3}{10}$

80. (b);



B = 4 , C = 5
Required time $= \frac{20\times 5}{9} = \frac{100}{9} = 11\frac{1}{9}\ days$

ENGLISH LANGUAGE

81. (e); Refer the second and third paragraphs of the passage. All the three statements are clearly mentioned there to verify that services are more urbanized than manufacturing. Hence (e) is the correct option.

82. (c); Refer the third paragraph of the passage, "…whereas large states such as Madhya Pradesh have experienced an above-average urbanization in services but a below-average urbanization in manufacturing." So, statement (II) is incorrect regarding manufacturing sector. Statements (I) and (III) are clearly mentioned in fourth and third paragraphs respectively. Hence (c) is the correct option.

83. (e); Refer the second last paragraph of the passage, "Other organized services with high use of technology include financial intermediation, post and telecommunications, other business activities and supporting/auxiliary transport activities, and travel agencies. Education and health services also record a high usage of computers, but show lower internet usage." So, it can be easily said that all four services require the high usage of technology. Hence (e) is the correct option.

84. (a); Read the passage carefully, the author has tried to bring all the important facts and figures related to the services and manufacturing in India and their contributions towards economic development which ultimately imply that services are more urbanized than manufacturing but they are not tied to big cities and thus raising the possibility of their being a growth driver that can promote inclusive spatial development. Hence only (a) summarizes the passage in a better and most appropriate way.

85. (b); Read the passage carefully, the author has tried to bring detailed treatment of issues related to services and manufacturing sector in India. He dives deep and tries to follow the chain of reasoning and draw inferences from them. The facts and figures thus accumulated help the author in analyzing the subject in a better way. Hence it can be said that the author's style of writing is analytical.

86. (d); **Spatial** means relating to space. Hence '**Dimensional**" is the word most similar in meaning to it.
Foundational means denoting an underlying basis or principle; fundamental.
Radical means characterized by departure from tradition; innovative or progressive.
Elementary means relating to the rudiments of a subject.

87. (a); **Counterpart** means a person or thing that corresponds to or has the same function as another person or thing in a different place or situation.
Analogue means a compound with a molecular structure closely similar to that of another. Hence both are similar in meanings.
Bantam means a level of amateur sport typically involving children aged between 13 and 15.
Insignia means a sign or token of something.
Transcription means an arrangement of a piece of music for a different instrument, voice, or group of these.

88. (b); **Concentrated** means wholly directed to one thing; intense. **Condensed** means made denser or more concise; compressed or concentrated. Therefore, both are similar in meaning.
Critical means expressing adverse or disapproving comments or judgments.
Unyielding means (of a mass or structure) not giving way to pressure; hard or solid.

89. (b); **Upturn** means an improvement or upward trend, especially in economic conditions or someone's fortunes. **Plummet** means a steep and rapid fall or drop. Hence both are opposite in meanings.
Agitation means a state of anxiety or nervous excitement.
Transpose means cause (two or more things) to exchange places.
Convulsion means a violent social or political upheaval.

90. (d); **Periphery** means the outer limits or edge of an area or object. **Axial** means relating to or forming an axis. Hence both are opposite in meanings.
Selvage means an edge produced on woven fabric during manufacture that prevents it from unraveling.
Ecliptic means a great circle on the celestial sphere representing the sun's apparent path during the year, so called because lunar and solar eclipses can only occur when the moon crosses it.
Arsenal means an array of resources available for a certain purpose.

91. (c); Referring to the first paragraph of the passage, we can say that to build the nation strong and prevent the youth from engaging themselves in undesirable activities, the government is encouraging the youth to facilitate entrepreneurship by giving them access to credit, ease of getting clearances and providing them skill development. Hence option (c) is the correct choice.

92. (e); Referring to the second paragraph of the passage, we conclude that all the given statements are correct. All the given statements need to be exercised in order to ensure job creation in the country.

93. (b); As it is clearly mentioned in the third paragraph of the passage that government is not banning the production of alcohol or tobacco and letting the consumers to make the final choice as its production is bringing large revenues and more importantly a good fraction of the population is engaged in its production. So, the banning may affect those farmers who are directly engaged into its production. Moreover, the revenues so generated could be utilized in various developmental projects. Hence the government is skeptical about the decision related to banning of alcohol or tobacco.

94. (c); "A fundamental right to create jobs" is an appropriate theme of the passage as it talks about giving freedom to people to create jobs in the country which forms the central idea of the passage. Hence (c) is the correct option.

95. (c); Refer to the last paragraph of the passage "Digital tools transmitted through mobile phones can aid in providing information about technology, markets and price", "Informed consent to share Aadhaar-linked data, with adequate privacy protections, can aid in designing customized policies, products and services that cater to the needs of job creators". Hence both the sentences (I) and (III) are correct.

96. (a); "uncovering, limits" is the correct set of words that makes the sentence meaningful. **Uncovering** means discovering (something previously secret or unknown). **Limit** means a point or level beyond which something does not or may not extend or pass.

97. (d); "slashed, review" is the correct set of words that makes the sentence meaningful. **Slashed** means reduced (a price, quantity, etc.) greatly. **Review** means a formal assessment of something with the intention of instituting change if necessary.

98. (a); "amendments, facilitate" is the correct set of words that makes the sentence meaningful. **Amendment** means a minor change or addition designed to improve a text, piece of legislation, etc.
Facilitate means make (an action or process) easy or easier.

99. (b); "capacity, undertake" is the correct set of words that makes the sentence meaningful. **Capacity** means the ability or power to do or understand something. **Undertake** means commit oneself to and begin (an enterprise or responsibility); take on.

100. (e); "publicized, hoped" is the correct set of words that makes the sentence meaningful. **Publicized** means gave out information about (a product, person, or company) for advertising or promotional purposes. **Hope** means want something to happen or be the case.

101. (a); A-D makes a combination. Similarly, B-C makes another combination. F should follow E. Hence **ADEFBC** is the correct sequence to form a meaningful paragraph.

102. (e); G-E makes a combination and E should be the concluding sentence. A-C and F-G make other combinations. Hence **BDACFGE** is the correct sequence to form a meaningful paragraph.

103.(d); B-E makes a combination with B forming the first sentence of the paragraph. Similarly, A-F-G makes another combination. Hence **BEDAFGC** is the correct sequence to form a meaningful paragraph.

104. (a); E should be the first sentence, followed by B. F should be the concluding sentence. Also, A-D makes a combination. Hence **EBCADF** is the correct sequence to form a meaningful paragraph.

105. (c); C-F makes a combination. Also, C should be the first sentence. D-E makes another combination. Hence **CFDEBA** is the correct sequence to form a meaningful paragraph.

106. (c); 'with many wondering whether this relic of' is the correct phrase as when we go by options, options (a) and (b) are incorrect as "whether this is a relic of" does not fit to sentence structure. Option (d) is incorrect as the phrase is not citing any reason. Hence only option (c) fits perfectly and it is in accordance to the correct grammatical usage to make the sentence structurally correct.

107. (a); 'to question the conduct of elections' is the correct phrase. All other phrases except (a) can be easily eliminated as they do not have the correct grammatical syntax to fit into the sentence. The use of 'so as' is redundant in the given sentence. Hence (a) is the correct option.

108. (b); 'Not stopping with scepticism of the claim' is the correct phrase as the sentence is not in Past Tense. Moreover, by eliminating the options (a), (c) and (d) on the basis of their incorrect grammatical syntax, the correct option i.e. (b) can be chosen.

109. (d); 'who had obtained business visas to teach Mandarin' is the correct phrase as the word "accused" indicates that the later part of the sentence talks about the past event. Also, if we go by options, options (a), (b) and (c) can be eliminated as their structures are not grammatically correct enough to fit into the sentence. Hence (d) is the correct option.

110. (c); 'and continue to raise India's concerns on sovereignty' is the correct phrase as it is to be noted that the sentence is in continuation and it should be added with the help of conjunction "and". Other options do not form a suitable substitute. Hence (c) is the correct option.

111. (b); Use 'to' before 'do' as the two infinitives "to finish his work or **to do** much of it" are connected with '**or**'.

112. (e); All the given sentences are grammatically correct.

113. (a); Use 'no fewer' in place of 'no less' as '**no less**' is used as a **Quantitative Adjective**, while '**no fewer**' is used as a **Numeral Adjective**.
e.g. You need no less than 2 kilos of sugar.
You need no fewer than three rooms.

114. (d); Use 'left off' or 'gave up' in place of 'left' as "**leave off/give up**" means "**stop**" while "**leave**" means "**go away from**". e.g. It is time to leave off work. Or, He gave up smoking.

115. (a); Replace 'from' by 'of' as "**born of somebody/good parents/bad parents**" is the correct usage.

116. (a); Before choosing any option, read the paragraph carefully. It talks about antibiotic resistance. The first sentence and the sentence following the blank space should tally with the required statement for the given space. Among five options, option (a) fits appropriately to the given blank space as it is the only option focusing on antibiotic resistance. Other options talk about either Bedaquiline therapy or drug resistance. Hence (a) is the correct choice.

117. (b); Option (b) is correct. The sentence written in option (b) completes the passage in the most appropriate way. The need for an effective monetary policy is expressed in this article to balance the link between consumption and growth.

118. (c); Read the paragraph carefully. It talks about child-centrism and the points mentioned by John Dewey. Now look at the options one by one. Options (a) and (b) do not fit into the blank space as both the statements fail to add meaning to the following sentence. Similarly, options (d) and (e) can be easily eliminated on the basis of their meanings as they do not align with the meaning of the paragraph. Hence only option (c) fits appropriately. It can also be inferred from the very next sentence, "Without the end…"

119. (a); The given paragraph talks about the economic survey's explanation and the condition of Indian economy during 2000s. The preceding sentence to the blank space points at the plans that Indian firms took during that period as the world economy was booming. Thus, the sentence following this statement should be related to the steps taken by them. When we look at the given options, only option (a) expresses some steps taken during that period which can be verified through the following sentence to the blank space. Other options do not add meaning to the given paragraph.

120. (e); Read the paragraph carefully. It talks about certain social ills that our education system is accustomed to. The use of word 'yet' in the other half sentence of the blank space states that the statement should contradict with it. In the given options, (a), (b) and (c) can be easily eliminated if one goes by their meanings which do not suit to the paragraph. Options (d) and (e) look obvious to fit correctly but option (d) can be eliminated as it refers to 'Science' which makes it quite incorrect for this given space. Hence option (e) is the correct statement which adds meaning to the paragraph appropriately.

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Mock 51

RBI Grade B Phase I 2019

REASONING ABILITY

Directions (1-5): Study the following information carefully and below to answer these questions.

Seven family members namely A, Q, R, C, I, M and N start their own business in four different startups i.e., Mobile enterprises, Cement Agency, Arm & sons and Garments, but not necessarily in the same order. Not more than two members start business in same startups. Also, some member likes fruits and some member likes colours. Fruits are Orange, Litchi, Apple, Banana and colours are red, yellow and pink but not necessarily in the same order.

M's brother-in-law starts his business with M's uncle in the same startups and likes Banana. Only A's wife starts her business in the 'Cement Agency' startups. M's husband starts his business with M's father in the Mobile enterprises startups and does not like Orange. M's daughter likes yellow colour but does not starts her business in Garments startups. C is brother-in-law of N, who is a female and Q is brother of one of the married male person of the family. M's mother starts her business in the same startups as A's daughter. No one who starts their business in the Mobile enterprises and 'Arm & sons' startups likes Apple. I's maternal grandfather likes red colour. The one who likes pink colour starts his/her business in the Garments startups.

1. Who among the following person starts his/her business in the Garments startups?
(a) A (b) C (c) R
(d) Q (e) Both (b) and (d)

2. How many persons starts their business in Arms & sons startups?
(a) Two (b) One (c) Three
(d) Either (a) or (b) (e) None of these

3. How is R related to A?
(a) Husband (b) Father-in-law (c) Uncle
(d) Brother (e) None of these

4. Who among the following person likes Apple?
(a) R's son-in-law (b) I (c) C
(d) A's wife (e) None of these

5. R's brother likes which of the following colour/fruit?
(a) Red (b) Apple (c) Orange
(d) Pink (e) None of these

Directions (6-10): Study the following information carefully to answer the given questions.

A number arrangement machine when given an input line of numbers rearranges them following a particular rule in each step. The following is an illustration of input and rearrangement.
Input: 95 11 76 21 89 42 64 31
Step I: 2 76 21 89 42 64 31 14
Step II: 3 2 76 42 64 31 14 17
Step III: 4 3 2 42 64 14 17 13
Step IV: 6 4 3 2 14 17 13 10
Step IV, is the last step.
Input: 57 21 16 49 23 29 36 42 45 51

6. How many steps are required to complete the given arrangement?
(a) III (b) V (c) IV
(d) VI (e) None of these

7. How many elements are there between '3' and '42' in step-II?
(a) Two (b) One (c) Three
(d) Four (e) None of these

8. Which number would be at the fourth position from the right end in the penultimate step of the output?
(a) 7 (b) 6 (c) 13
(d) 12 (e) None of these

9. What is the sum of the third element from the left in step III and 2nd from the right in step IV?
(a) 17 (b) 16 (c) 30
(d) 10 (e) None of these

10. What is the difference between the third element from the right in step IV and the second element from the left in step III?
(a) 2 (b) 4 (c) 8
(d) 3 (e) None of these

Directions (11-15): Study the information carefully and answer the questions given below.

Seven person A, B, C, D, E, G and F live in a building having seven floors such that the ground floor is numbered 0, the floor just above it is numbered 1 and so on till the topmost floor numbered 6. They all like different colours. G lives above C. The addition of floor numbers of E and A is one less than the floor number on which C lives. D lives just

above F. A does not like Grey. At least one person lives between the one who like Orange and D. Not more than one person lives between B and E. Three persons live between A and the one who like Blue. B like Pink. The one who likes Grey does not live next to the one who like Blue. Equal number of persons live between D and E and the ones who like Red and White. The one who like White lives immediate above the one who like Blue. G likes Black.

11. Who among the following live on the floor immediate below G?
(a) E (b) F (c) C
(d) B (e) none of these

12. How many persons live between B and the one likes Red?
(a) Two (b) One (c) Three
(d) Four (e) None of these

13. On which of the following floors does B live?
(a) 1st (b) 2nd (c) 3rd
(d) 4th (e) none of these

14. Who among the following like Orange?
(a) E (b) F (c) C
(d) B (e) none of these

15. Four of following form a group find the one that does not belong to that group?
(a) E,C (b) F,B (c) C,B
(d) B,A (e) A,E

Direction (16-18): In each of the questions below are given some statements followed by some conclusions. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.
(a) If only conclusion I follows.
(b) If only conclusion II follows.
(c) If either conclusion I or II follows.
(d) If neither conclusion I nor II follows.
(e) If both conclusions I and II follow.

16. Statements: Only a few Field are Grass. Few Grass are Tree. All Tree are Green.
Conclusions: I. Some Field are not Grass.
II. Some Field are not Green.

17. Statements: Only Fruit are Candy. No Sweet is Candy.
Conclusions: I. All Sweet being Candy is a possibility.
II. Some Fruit can never be Sweet.

18. Statements: Some Red are Blue. No Pink is Blue. All Pink are White.
Conclusions: I. Some Red are not Pink.
II. Some Blue can never be White.

Directions (19-23): Study the following information carefully and answer the questions given below:

There is CD axis in such a way that C is to the west of D. There is XY axis in such a way that X is to the north of Y. CD axis intersect with XY axis at a point Q in such a way that CQ is 16m, QD is 19m, QX is 14m, QY is 20 m.

P1 starts walking along the CD axis towards D, starting from point C after walking 18m he takes a right turn and after walking a distance which is half of the distance between QY line he stops at point N. Point S is to the south of point L. P2 starts walking along the QX axis after walking 7m to the north from point Q he takes a right turn and walks for 2m and stops at point K. P3 takes a left turn from point X and after walking a distance which is greater than 16m he stops at point L. P4 starts walking along the QY line from a point towards Y to reach point A such that distance between point A and point Y is 1m less than CQ and then takes a right turn and after walking 32m he stops at point S.

19. What is the shortest distance between points Q and K?
(a) $\sqrt{53}$m (b) $\sqrt{55}$m (c) $5\sqrt{13}$m
(d) 53m (e) None of these

20. What is the shortest distance between Point L and point S?
(a) 18m (b) 22m (c) 19m
(d) 17m (e) None of these

21. In which direction is point L with respect to P1's final position?
(a) North east (b) South east (c) North
(d) South (e)North west

22. Which of the following points are in a straight line?
(a)K X Q (b)Q Y D (c) DQC
(d) S Y D (e) None of these

23. What is the total distance between points L and X and also determine in which direction is point X with respect to the point C?
(a) 32m, North west (b) 32m, North east
(c) 32m, South east (d) 35m, South
(e) None of these

Directions (24-25): These questions are based on the following five numbers:
196 615 254 431 329

24. If we arranged all digits in decreasing order within the number from left then, how many Odd numbers thus obtained?
(a) One (b) None (c) Three
(d) Two (e) More than three

25. If we interchanged 1st and 3rd digit of each number then, find the largest number thus obtained?
(a) 615 (b) 329 (c) 254
(d) 196 (e) 431

Direction (26-30): Study the following information carefully and answer the questions given below:

Eight persons i.e. A, B, C, D, P, Q, R and S are sitting in two parallel rows but not necessarily in same order. Persons sitting in one row are facing the persons sitting in another row. Persons sitting in row 1 are facing North and persons sitting in row 2 are facing South. They get different marks in the exam.

S sits 2nd to the right of the person who faces P. Persons who get minimum and maximum marks in the exam are sitting at extreme ends. Difference between the marks of Q and S is 7. Person who gets 15 marks sits 2nd to the left of the person who gets 40 marks. Person who gets 30 marks is an immediate neighbor of the persons who get 63 and 70 marks. C faces the person who gets 55 marks. Person who gets 50 marks sits immediate left of P. C gets 25 marks. B sits 2nd to the left of D. P faces North. D doesn't get 55 marks. R gets double marks than C.

26. How many marks D gets in the exam?
(a) 15 (b) 25 (c) 30
(d) 40 (e) None of these

27. Who among the following person gets highest marks?
(a) A (b) Q (c) P
(d) S (e) None of these

28. What is the position of A with respect to R?
(a) Immediate right (b) Immediate left
(c) 2nd to the right (d) 2nd to the left
(e) None of these

29. Which of the following is not true regarding B?
(a) B sits at extreme end
(b) C faces B
(c) B gets 3rd highest marks
(d) Two persons are sitting between B and S
(e) All are true

30. If P is related to 15, C is related to 50 then, in the same order who is related to 55?
(a) S (b) D (c) Q
(d) R (e) None of these

31. Analyzing resting state functional MRIs, the study, published recently in the online journal NeuroImage Clinical, reveals that HIV-infected children have lower neuropsychological test scores thus reflecting reduced memory span, attention deficit and decreased visual-motor coordination among other conditions.

Which of the following can be inferred from the given statement?
(a) Those children who are not infected with HIV have sharper memory.
(b) Only MRI's can provide the exact picture or image of your inside body.
(c) These symptoms such as reduced memory span, attention deficit and decreased visual-motor coordination can only be seen among children.
(d) HIV is a disease which only affects the brain in the human body.
(e) HIV infected Children who are neuropsychologically stronger are less venerable towards disease such as reduced memory span, attention deficit etc.

Direction (32): Study the information carefully and find which of the following can be concluded from the given statement.

32. Company A's profit has been declining in third continuous year and its employees are also resigning from the company as they are not finding their future secure in the company.
Conclusion:
(I) The employees of company A who resigned got better opportunities.
(II) The company A's profit has been declining as its product is not based latest technology.
(a) Only I (b) Only II (c) Both I and II
(d) Either I or II (e) Neither I nor II

33. The increasing amount of NPA in public sector banks is causing trouble for RBI and for India's GDP as well.
Which of the following course of action can be following based on the given statement?
Course of Action-
(I) RBI should make a committee to review the problem of NPA and also to find out suitable measures to curb it.
(II) All the public sector banks should be privatized as this is the only way to get rid from increasing NPA.
(a) Only I (b) Only II (c) Both I and II
(d) Either I or II (e) Neither I nor II

Direction (34-38): Study the following information carefully and answer the given questions.

A certain number of persons sit in a row facing North. All of them likes different color.

Only seven persons sit between S and D, who likes green. Only three persons sit between S and L. L sits 3rd from one of the ends. As many persons sit to the left of S is same as to the right of M. M sits immediate left of D and likes red color. Q likes grey color and sits sixth to the right of M. J sits

4th to the left of M and likes peach color. The number of persons sitting between J and Q are one more than the number of persons sitting to the left of N, who likes black. F likes blue and sit at one of the ends. The one who sits second to the left of N likes yellow color. The one who likes violet sits 4th to the left of one who likes yellow.

34. How many persons sit in the row?
(a) 22 (b) 23 (c) 21
(d) 20 (e) 18

35. Who likes violet Color?
(a) the one who sits 3rd to left of M
(b) the one who sits 2nd to right of D
(c) the one who sits 2nd to right of F
(d) S
(e) cannot be determined

36. What is the position of S with respect to the one who likes peach color?
(a) third to the left (b) Fifth to the left
(c) Third to the right (d) Second to the right
(e) Fourth to the left

37. Who sits exactly between D and the one who likes violet color?
(a) the one who likes blue
(b) the one who likes red
(c) the one who likes grey
(d) the one who likes yellow
(e) the one who likes black

38. How many persons sit to the right of Q?
(a) 13 (b) 4 (c) 8
(d) 5 (e) None of these

39. Statement: A slump in home sales has pushed builders' inventory to "unsustainable levels" in the National Capital Region of Delhi, creating conditions for a real price correction that developers have so far avoided.
Which of the following statements is definitely true on the basis of the given statement?
(a) Demand for houses is quite low in most of the big cities.
(b) The high inventory level will hamper the ability of launching new projects by the builders.
(c) Builders in the market who have shown a good track record of delivering on time and on their promises have been able to garner sales even in this slow market.
(d) Unless this unsold stock gets absorbed, it will be difficult for consumer confidence to come back in this market.
(e) High prices have pushed most of the on-sale apartments beyond the reach of average home buyers.

40. Statement: According to the manpower Employment Outlook Survey, globally, Indian employers are the most upbeat on hiring plans in the fourth quarter ending December 2015.
Which of the following can be an assumption in the given information? (An assumption is something that is supposed or taken for granted)
(a) Decline in the profit margins of the company
(b) Establishment of more branches by the MNCs in India
(c) Maintenance of positive growth rate by the MNCs in India.
(d) Increase in the growth of service sector in June 2015.
(a) Only A and C (b) Only B and D (c) Only A and B
(d) Only C and D (e) Only B and C

Directions (41-45): Each of the following questions below consists of a question and two statements numbered I and II given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and give answer.
(a) if the data in statement I alone are sufficient to answer the question, while the data in statement II alone are not sufficient in answer the question.
(b) if the data in statement II alone are sufficient to answer the question, while the data in statement I alone are not sufficient to answer the question.
(c) if the data in either in statement I alone or in statement II alone are sufficient to answer the question.
(d) if the data in both the statements I and II together are not sufficient to answer the question.
(e) if the data in both the statements I and II are together necessary to answer the question.

41. Eight persons M, N, O, P, Q, R, S and T are sitting around a circular table facing the center. Who sits opposite to M?
I. P sits second to the left of R and sits opposite to Q. T is an immediate neighbor of N and O.
II. S sits third to the left of Q. O sits second to the right of M.

42. Who among U, V, W, X, Y and Z get the lowest rank in the class?
I. U's rank is lower than X and Z. V's rank is higher than W. Y's rank is not high as X's rank.
II. V's rank is higher than X. Z's rank is lower than X and Y. No one gets rank between W and X, and W and Y.

43. Six friends A, C, E, G, K and M are sitting in a row facing in the north direction. Who sits between E and K?
I. A sits second from the right end. E sits third to the left of C.
II. C is not an immediate neighbour of M, who does not sit at any of the extreme ends.

44. There are six members F, G, H, J, K and L in a family, than how is J related to F ?
I. K is mother of L. H is granddaughter of F, who is husband of K.
II. G is father of J and son-in-law of K.

45. Among five friends A, B, C, D and E having different weights, who is the lightest?
I. C is lighter than only one friend. Only one friend is lighter than E. A is not the heaviest.
II. C is heavier than only three friends. Only one friend is lighter than E. A is neither the heaviest nor the lightest in the group. B is the heaviest in the group.

Directions (46-50): Read the following information carefully and answer the questions given below:

Nine persons i.e. P, Q, R, S, T, X, W, U and V who all born on different dates in three different months of the same year i.e. January, June and December but not necessarily in the same order. Only three persons born in any of the month. One person born between P and V and both doesn't born in the same month. P born on the 30th of the month. T born on 25th of a month having 30 days. V born on 26th of a month. P does not born in the month having 30 days. Three persons born between P and X. Only two persons born between R and T. The one who born immediately before Q was born on 18th. The number of persons born between U and V is same as the number of persons born between V and W. S born on 27th. One of the persons born on 29th in the month of January. There is a difference of 8 days between the birthdate of Q and S. X born on 16th of a month. There is a difference of 5 days between the birthdate of X and R. R born on a prime number date. W does not born on odd number date.

46. How many persons born after T?
(a) Two (b) Three
(c) More than three (d) One
(e) No One

47. Who among the following pair of persons born in the same month?
(a) W and V (b) V and P (c) Q and U
(d) W and R (e) None of these

48. Who among the following born immediately after W?
(a) U (b) P (c) S
(d) Q (e) None of these

49. R born on which of the following date?
(a) 16th (b) 29th (c) 11th
(d) 26th (e) None of these

50. Who among the following born immediately after Q?
(a) U (b) P (c) S
(d) R (e) None of these

Direction (51-55): In these questions, relationship between different elements is show in the statements. The statements are followed by conclusions. Study the conclusions based on the given statements and select the appropriate answer:
(a) If only conclusion I follows.
(b) If only conclusion II follows.
(c) If either conclusion I or II follows.
(d) If neither conclusion I nor II follows.
(e) If both conclusions I and II follow.

51. Statements: $G < U \leq R = T \leq W < Q \geq S = F$
Conclusions: **I.** $R < Q$ **II.** $F > T$

52. Statements: $O \geq T \geq Y > R = D$; $E < W = R$
Conclusions: **I.** $D = W$ **II.** $D > E$

53. Statements: $H > U \geq T \geq W = Q \leq L = M \leq F$
Conclusions: **I.** $W < F$ **II.** $Q = F$

54. Statements: $S > D = T \geq I > K \leq L$; $D \leq P \leq O$
Conclusions: **I.** $O > K$ **II.** $L > D$

55. Statements: $U < F \leq G = C < X \geq Z > S$
Conclusions: **I.** $G > Z$ **II.** $C > U$

Direction (56-60): Study the following information carefully and answer the questions given below:
In a certain code language:
"very heavy rain" is coded as "sd cg rv"
"heavy weight boxer" is coded as "cg yh jn"
"very high weight" is coded as "sd jn az"

56. What is the code of "boxer" as per the given code language?
(a) cg (b) yh (c) jn
(d) sd (e) None of these

57. What is the code of "rain" as per the given code language?
(a) cg (b) sd (c) az
(d) rv (e) None of these

58. Which of the following words has code of "cg jn" as per the given code language?
(a) boxer weight (b) heavy weight (c) heavy rain
(d) high weight (e) None of these

59. Which of the following words has the code of "sd az rv" as per the given code language?
(a) high weight boxer (b) high weight rain
(c) very high rain (d) very heavy boxer
(e) None of these

60. What is the code of "high weight" as per the given code language?
(a) az yh (b) sd rv (c) cg jn
(d) az jn (e) None of these

QUANTITATIVE APTITUDE

Directions (61-65): Study the following information given in the paragraph and answer the questions accordingly.

Following information gives data regarding number of persons in a village who plays different sports i.e. Cricket, Football and Hockey. Each person plays at least one sports.

There are total 800 persons in a village who plays sports. 43 % of the total persons plays Cricket, 52.5 % of the total persons plays football and 55 % of the total persons plays Hockey. 96 persons plays both cricket and football but not Hockey. 100 persons plays both cricket and Hockey but not Football, 88 players plays both Hockey and Football but not cricket and 60 persons plays all the three sports.

61. Find the percentage of persons who plays at least two sports?
(a) 47 % (b) 43 % (c) 10 %
(d) 14 % (e)15 %

62. Find the difference of persons who plays only football and persons who play only hockey?
(a) 20 (b) 18 (c) 16
(d) 24 (e)12

63. How many persons are there who plays neither football nor cricket ?
(a) 172 (b) 144 (c) 176
(d) 192 (e) 156

64. Find the respective ratio of persons playing both cricket and football to the persons playing both football and hockey together?
(a) 12: 11 (b) 11: 12 (c)9: 13
(d) 8: 15 (e) 12: 13

65. Number of persons playing only football is what percent more/less than the persons playing both cricket and hockey together?
(a) 64 % (b) 82 % (c) 80%
(d) 76 % (e)55%

Directions (66-70): Find the approximate value of question mark (?) in the following questions-

66. $?\%$ of 24.91% of 39.93% of$((11.93)^2 + 5.98) = 2.25$
(a) 12 (b)18 (c) 20
(d)15 (e)25

67. $(7.92)^3 + (7.92)^2 = -99.96 + (?)^2$
(a) 26 (b)24 (c) 36
(d)16 (e)25

68. $\frac{32.99\times41.89\times4.98}{10.93\times14.88} + 13.97 = ?\%$ of 279.88
(a) 35 (b)15 (c) 25
(d)30 (e)20

69. $96.96 + 996.96 - 99.66 + 999.96 + 5.96 = 399.96 \times ?$
(a) 8 (b)7 (c) 6
(d)5 (e)4

70. 9.99% of $299.99 = (?)^3 + (?)$
(a) 6 (b)2 (c) 5
(d)4 (e)3

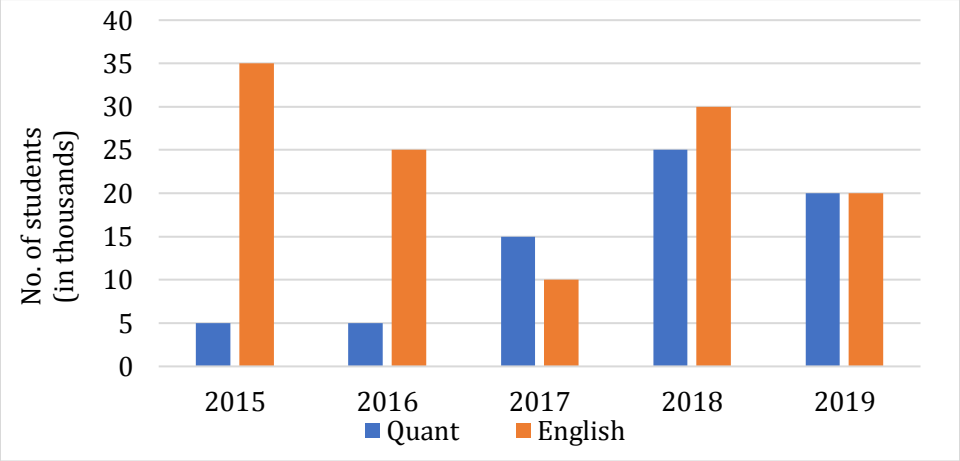
71. My sister was born 26 yrs after my mother was born and I was born 28 yrs after my father was born. The present average age of my family is 32.5 yrs. After 3 yrs from now my sister will get married and will leave the family, then average age of family will become 41 yrs. What is the present age of my mother?(in yrs)
(a) 40 (b)50 (c) 45
(d)41 (e)42

72. Sudeep marked up the price at a price higher than cost price & gave 10% discount on every purchase and a complimentary chocolate box worth Rs. 300 on minimum purchase of Rs. 2000. This way he gained 20%. If a customer purchased for Rs. 3000. Find the cost price for Sudeep for the articles sold.
(a)Rs. 2500 (b) Rs. 2250 (c) Rs. 2750
(d)Rs. 2000 (e) None of these

73. Ritesh travels at 1 kmph to reach station 500m far from his house to catch a train. He started but after 4 minutes, he realized that he forgot a document at home so he returned with same speed. What should be his speed (in kmph) so that he catches the train?
(a)0.36 (b) 0.27 (c) 1.27
(d) 1.36 (e) 1.5

74. Length of a rectangular land is twice the radius of a circle of circumference 132 cm. The land area got increased by 144 sq.cm, when a square land is attached along the breadth of the rectangle. Find area of rectangle in sq.cm.
(a) 1008 (b) 257 (c) 504
(d) 756 (e) 1512

Directions (75-79): Given bar graph shows no. of students (in thousands) who opted for three different specialization during the given five years in a university.



75. Out of total number of students who opted for the given three subjects, in year 2019, 38% were girls. How many boys opted for reasoning in the same year?
(a) 1124 (b) 1536
(c) 1316 (d) Cannot be determined
(e) None of these

76. If the total number of students in the university in the year 2017 was 4,00,000, then the total number of students who opted for the given three subjects were what percent of the total students?
(a) 17% (b) 10% (c) 14%
(d) 7% (e) 21%

77. What is the total number of students who opted for Quant and reasoning together in the years 2016, 2017 and 2019 together?
(a) 97000 (b) 93000 (c) 85000
(d) 96000 (e)95000

78. The total number of students who opted for Reasoning in the years 2015 and 2018 together are approximately what percent of the total number of students who opted for all three subjects in same years? (approx..)
(a) 36% (b) 24% (c) 44%
(d) 32% (e) 46%

79. What is the respective ratio between the number of students who opted for English in the years 2016 and 2018 together to the number of students who opted for Quant in the years 2015 and 2019 together?
(a)11 : 5 (b)11 : 9 (c)11 : 7
(d)14 : 3 (e)13:7

80. A tank contains 384 liters mixture of milk & water in the ratio of 15 : 17. If X liters of mixture taken out and (X – 14) liters of milk & (X – 34) liters of water added in remaining mixture so ratio of milk & water becomes equal. Find quantity of milk in original mixture is what percent of total final mixture?
(a) 40% (b) 35% (c) 45%
(d) 50% (e) 25%

81. Anurag & Ravi entered into a business with capital of Rs. 2000 & Rs. 1600 respectively. At the end of 8th month Anurag added Rs. 400 more and he left the business after 10 months, after one year's Ravi invested his profit in a scheme, which offers CI at 20% p.a. If after two years Ravi gets total amount of Rs. 6912, then find total profit of Anurag?
(a) 5200 Rs. (b) 2550 Rs. (c) 10200 Rs.
(d) 7650 Rs. (e) 2700 Rs.

82. 8 men and 10 women can do a work in 15 days while 10 men and 18 women can do that work in 10 days. 4 men and 5 women started the work and after 10 days all men left the work then find how many more women would be required to complete the whole work in 21 days?
(a) 12 (b) 15 (c) 16
(d) 10 (e) 18

83. A, B & C are three inlet pipes. Time taken by A & B together to fill half of the tank is same as time taken by pipe C alone to fill one – sixth of the tank. If A, B & C together can fill the tank in 9 hours, then find time taken by pipe C alone to fill the tank?
(a) 24 hours (b) 18 hours (c) 28 hours
(d) 36 hours (e) 42 hours

84. A man invested Rs. 1600 on CI for two years at the rate of R% p.a. and gets amount of Rs. 2304. If man invested same sum on SI for same period of time at the rate of (R – 8)%, then find interest he will get?
(a) 384 Rs. (b) 324 Rs. (c) 316 Rs.
(d) 372 Rs. (e) 306 Rs.

85. In a village-X, a total of 6000 registered voters (male + female) had cast their votes in which70% of total registered male voters and 45% of total registered female voters had voted. Iftotal registered male voters are 2000 more than total registered female voters, then find the total number of registered voters in village-X.

(a) 20000 (b) 15000 (c) 10000
(d) 5000 (e) 25000

Directions (86-90): What will come in place of (?) in the following number series?

86. 120, 60, 60, 90, 180, ?

(a) 420 (b) 450 (c) 400
(d) 500 (e) 540

87. ?, 190, 210, 238, 274, 318

(a) 170 (b) 198 (c) 186
(d) 178 (e) 190

88. 112, ?, 166, 238, 382, 670

(a) 152 (b) 135 (c) 144
(d) 126 (e) 130

89. 138, 210, 66, 282, -6, ?

(a) 354 (b) 320 (c) 336
(d) 348 (e) 360

90. 72, 80, 71, 135, ?, 326

(a) 125 (b) 110 (c) 90
(d) 105 (e) 95

ENGLISH LANGUAGE

Direction (91-100): Read the following passage carefully and answer the questions given below it. Certain words are given in bold to help you locate them while answering some of the questions.

Paragraph 1: Most CEOs are **grappling** with one particular challenge, irrespective of industry or geography: getting the right leadership talent. Governments face this challenge too. The Indian government has responded to this challenge by taking the initiative to invite executives from beyond the ranks of the civil service to apply for certain Joint Secretary posts. While the idea clearly has merit, success is not automatically guaranteed. Through working around with the government, there are few elements too that increase the chance of success. Among them establishing objective criteria is one. The key decision makers involved in making a senior appointment rarely agree on what skills, qualities and experiences the role requires— and when they do, there is no guarantee that the requirements agreed to are the ones that are actually needed to be successful. This is why the process must begin with a real probing of the position and its larger context.

Paragraph 2: Having objective criteria also gives decision makers confidence that their appointments will be able to stand up to public scrutiny without fear of seeming biased towards or against candidates for caste, geography, political affiliation or other considerations. Public announcements inviting lateral entry applicants for open government positions preserve transparency but are not very effective recruiting strategies. Top talent has many options outside of public service. Government, therefore, cannot sit back and wait for these candidates to present themselves. It must **proactively** identify and approach executives with the desired skills a;nd experience. Precisely because the competition for talent is so intense, most successful corporations — even those regarded as highly desirable employers — follow this strategy. Very often governments are reluctant to follow suit so as to not appear to favor candidates. This is where the objective criteria come in. The fact that a given executive is approached and encouraged to apply is no guarantee that he or she will be appointed.

Paragraph 3: Our work with governments around the world suggests that in addition to the right motivation there are three key personal traits that predict success of lateral hires in such roles. The first is **resilience**. Government bureaucracy can be tough on outsiders; it is essential to have the ability to persevere in the face of constant pulls and pressures and aligning multiple stakeholders. Successful lateral hires also have a high level of curiosity. They acknowledge that they don't have all the answers, are eager to learn and model their behavior accordingly. These candidates know that while they may have many useful new ideas, they also have much to learn from career civil servants and that government has its own systems, formal and informal, that must be grasped before any innovations can be proposed. Finally, they have the ability to engage others. The ability to build consensus among stakeholders is essential. The government screening process traditionally includes appearing before a section panel of three to five interviewers, who each take their turn investigating topics they have divided between themselves. Unfortunately, this approach often results in only a surface-level understanding of the candidate. We have found that one-on-one or two-on-one interviews allow for a much more meaningful exploration of key points of a candidate's career, their mindset and approach. More focused interviews should be supplemented with

extensive referencing with finalist candidates. This combination of data will provide insight into a candidate's character, integrity and moral compass — all critical qualities for government roles.

Paragraph 4: Also government must accelerate the hire's integration. Successful recruiting is only part of the equation; the selected lateral hire must also be **primed** for success in his or her new organization. We were able to demonstrate the benefits of a systematic approach with a senior executive that we hired for the cabinet of a European country. We started by identifying cultural differences between the executive's old and new environments and helped develop strategies the executive could use to navigate this change. We then created an extensive playbook with detailed profiles of the management team outlining each person's priorities and concerns, and provided coaching to help the executive best position himself with his new peers. India's lateral entry programme has the potential to introduce new thinking and new expertise into key ministries. **Leveraging** on lessons learned elsewhere will allow India to more completely draw from the country's rich array of talent while maintaining the objectivity necessary to preserve the public trust.

91. What are the few elements mentioned in the passage that increase the chances of success in making the lateral entry work?
(a) Establishing objective criteria.
(b) Target the talent one needs.
(c) Successful lateral hires also have a high level of curiosity.
(d) Accelerating the new hire's integration.
(e) All of these.

92. Why is India's lateral entry program not very effective in recruiting strategies for government positions despite the transparency?
(a) Because of the new thinking into key ministries.
(b) As their approach is not very clear.
(c) The competition for talent is so intense even in most successful corporations.
(d) As it gives insight into a candidate's character, integrity and moral compass.
(e) None of these.

93. What is the main confrontation faced by the government and the directors of various multinational companies?
(a) To create strong formal innovations.
(b) To proactively identify and reach appropriate employees.
(c) To bring on the high level of curiosity.
(d) How to get the right leadership talent.
(e) None of these.

94. Why is government bureaucracy essential in case of lateral hiring in government?
(a) To keep the best position of executive to itself.
(b) As it plays important role in case of perseverance at times of constant pressures.
(c) For aligning multiple stakeholders.
(d) Both (a) and (b).
(e) Both (b) and (c).

95. What are the techniques that author is referring to that would provide an insight into a candidate's character and integrity?
(a) Being unbiased towards or against candidates for caste, geography, political affiliation or other considerations.
(b) Focused interviews along with extensive referencing with finalist candidates.
(c) Systematic approach to know the strategies of the candidate.
(d) Analyzing the skills required to provide an insight into a candidate's character.
(e) None of these.

Direction (6-8): Choose the word which is most nearly the SAME in meaning as the word printed in bold as used in the passage.

96. Grappling
(a) Releasing (b) Unfettering (c) Contending
(d) Extricating (e) Abandoning

97. Proactively
(a) Passively (b) Preemptively (c) Inertly
(d) Retroactively (e) Irresolutely

98. Resilience
(a) Obduracy (b) Pliability (c) Frailty
(d) Rigidity (e) Tenacity

Directions (99-100): Choose the word which is the OPPOSITE in meaning as the word printed in bold as used in the passage.

99. Primed
(a) Equipped (b) Loaded (c) Charged
(d) Groomed (e) Impulsive

100. Leveraging
(a)Swaying (b)Influencing (c)Dissuading
(d)Clouting (e)Esteeming

Directions (101-105): Read each sentence to find out whether there is any grammatical or idiomatic error in it. The error, if any, will be in one part of the sentence. The number of that part is the answer. If there is 'No error', the answer is option (e). (Ignore errors of punctuation, if any.)

101. (a) The infection which causes / (b) gums to bleed and teeth to fall out / (c) result from the build-up of / (d) a particular bacterium that is common to most mouths. / (e) No error

102. (a) After forty years of trying to / (b) understand why asbestos causes cancer, / (c) researchers have finally / (d) unraveled the mystery. /(e) No error

103. (a) A property dealer was / (b) shoot dead by four unidentified jacket-clad men / (c) while taking a morning walk / (d) in the park. / (e) No error

104. Having worked (a)/ for the whole day (b)/ you could have taken some rest (c)/ and start work tomorrow. (d)/ No error. (e)

105. Scarcely had he (a)/ gone a few steps (b)/ that he was told by someone (c)/ that his mother was no more. (d)/ No error. (e)

Directions (106-111): In the following passage, some of the words have been left out, each of which is indicated by a number. Find the suitable word from the options given against each number and fill up the blanks with appropriate words to make the paragraph meaningfully complete.

The researchers first asked a narrow, **__(16)__** question about whether people paid others to do "unenjoyable daily tasks," such as domestic work, to be able to "**__(17)__** their free time."

Only 28 percent of respondents said yes, spending an average $147.95 per month to buy themselves extra time. These people also **__(18)__** increased life satisfaction compared to those who did not **__(19)__** money this way.

In the second part of the **__(20)__**, researchers asked more than 1,800 Americans whether they spent money to buy "more free time." The responses were roughly **__(21)__** in half, with those who spent between $80 and $99 per month, on average, on outsourcing chores reporting a higher degree of life satisfaction.

106. (a) personal (b) common (c) right (d) specific (e) strict

107. (a) unite (b) procure (c) store (d) gather (e) increase

108. (a) recorded (b) posted (c) procrastinated (d) estimated (e) fabricated

109. (a) take (b) spend (c) apply (d) waste (e) draw

110. (a) theory (b) planning (c) effort (d) study (e) opinion

111. (a) get (b) deal (c) split (d) assign (e) quit

Directions (112-115): In each of the questions given below four words are given in bold. These four words may or may not be in their correct position. The sentence is then followed by options with the correct combination of words that should replace each other in order to make the sentence grammatically and contextually correct. Find the correct combination of the words that replace each other. If the sentence is correct as it is then select option (e) as your choice.

112. Many (A) **countries** are keeping their money in (B) **overseas** banks because the tax laws are less (C) **stringent** in foreign (D) **Americans.**
(a) A – B (b) B- C (c) C- D (d) A – D (e) No error

113. The Bandipur Tiger (A) **Reserve** on the Karnataka border (B) **spilling** some of our (C) **richest** wildlife areas (D) **contains** over into Tamil Nadu and Kerala.
(a) A – B (b) B- D (c) C- D (d) A – C (e) No error

114. United Voice, which represents (A) **government**, has called for the Queensland (B) **paramedics** to fund the (C) **positions** after the latest Queensland Health data showed (D) **ramping** was increasing.
(a) A – B (b) B- C (c) C- D (d) A – C (e) No error

115. Eighteen per cent of the world's (A) **population** lives in India, but the country (B) **global** 26 per cent of the (C) **bears** disease (D) **burden** due to air pollution.
(a) A - B (b) B- C (c) C- D (d) A – C (e) No error

Directions (116-120): Rearrange the following six sentences (A), (B), (C), (D), (E) and (F) in the proper sequence to form a meaningful paragraph and then answer the questions given below.

(A) Other resources are also heavily over-exploited in many of these regions. Depletion is causing economic and social distress in rural areas, though the manifestation is different in different settings.
(B) The government finance for well digging and pump installation with capital subsidies, massive rural electrification and pervasive energy subsidies all have enabled this process to aggravate.
(C) Groundwater is the backbone of rural economy in both semi-arid and arid regions of India.
(D) In the alluvial areas of Punjab, Rajasthan and Gujarat, water tables keep falling, increasing the cost of pumping.
(E) The past four decades have witnessed an explosion in well numbers in these regions for irrigated farming.
(F) Moreover, in the hard rock areas of AP, Telangana, Karnataka and Maharashtra, there are rampant well failures and seasonal depletion.

116. Which among the following becomes the **FIRST** statement of the paragraph after rearrangement?
(a) A (b) B (c) E
(d) F (e) C

117. Which among the following becomes the **FOURTH** statement of the paragraph after rearrangement?
(a) A (b) B (c) E
(d) F (e) C

118. Which among the following becomes the **LAST** statement of the paragraph after rearrangement?
(a) A (b) B (c) E
(d) F (e) C

119. Which among the following becomes the **SECOND** statement of the paragraph after rearrangement?
(a) A (b) B (c) E
(d) F (e) C

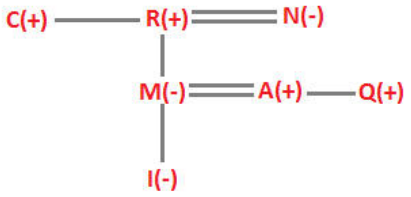
120. Which among the following becomes the **THIRD** statement of the paragraph after rearrangement?
(a) A (b) B (c) E
(d) F (e) C

Solutions

REASONING ABILITY

Directions (1-5):

Person	Startups	Colours/Fruits
R	Mobile enterprises	Red
Q	Garments	Banana
A	Mobile enterprises	Litchi
C	Garments	Pink
I	Arms & sons	Yellow
M	Cement Agency	Apple
N	Arms & sons	Orange



1. (e); 2. (a); 3. (b);
4. (d); 5. (d);

Directions (6-10): Logic: In the given Input-Output the numbers are arranged from both the ends simultaneously. In first step- Lowest number is arranged from the left end and highest number is arranged from the right end. In second step- 2nd lowest number is arranged from the left end and 2nd highest number is arranged from the right end and so on... Also while arranging the numbers, the numbers which are arranged from both end are replaced by the addition of the digits of that number.
Input: 57 21 16 49 23 29 36 42 45 51
Step I: 7 21 49 23 29 36 42 45 51 12
Step II: 3 7 49 23 29 36 42 45 12 6
Step III: 5 3 7 29 36 42 45 12 6 13
Step IV: 11 5 3 7 36 42 12 6 13 9
Step V: 9 11 5 3 7 12 6 13 9 6

6. (b); 7. (e); 8. (d)
9. (e); 10. (d);

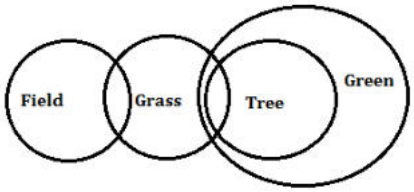
Direction (11-15):

Floor	Persons
6	G Black
5	D White
4	F Blue
3	B Pink
2	C Grey
1	E Red
0	A Orange

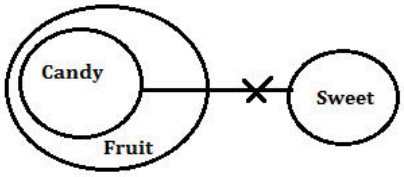
11. (e); 12. (b); 13. (c);
14. (e); 15. (d);

Direction (16-18):

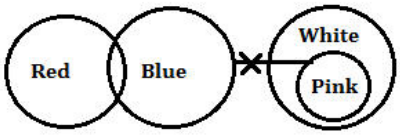
16. (a);



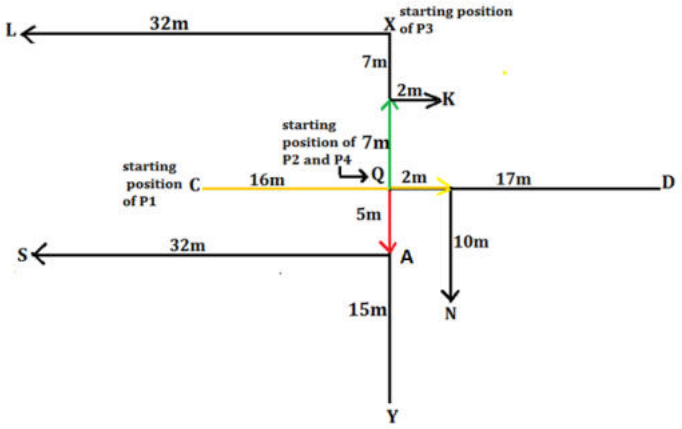
17. (b);



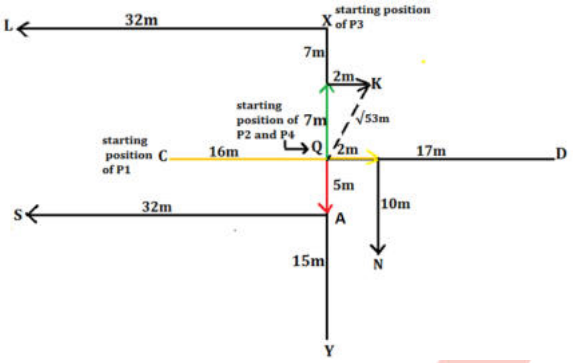
18. (a);



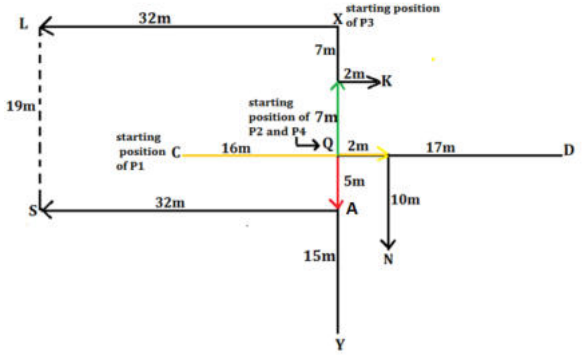
Directions (19-23): The final arrangement is:



19. (a);



20. (c);



21. (e);

22. (c);

23. (b);

Direction (24-25):

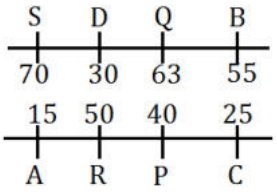
24. (c);

196 961	615 651	254 542	431 431	329 932

25. (b);

196 691	615 516	254 452	431 134	329 923

Direction (26-30):



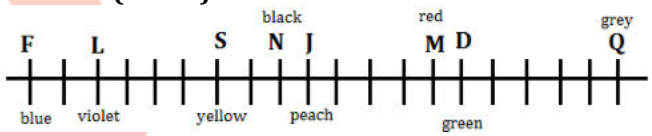
26. (c); **27. (d);** **28. (b);**
29. (e); **30. (b);**

31. (e); Only (e) can be inferred from the given statement as it is given that HIV-infected children have lower neuropsychological test scores thus reflecting reduced memory span, attention deficit.

32. (a); From the given statement it is clearly concluded that as the company's profit is decreasing and the employee who are resigning get the better opportunities but II cannot be concluded as nothing is mentioned about the technology used in the products of Company A.

33. (a); Only (I) follows as it is feasible measure to sustain the level of NPA.

Direction (34-38):



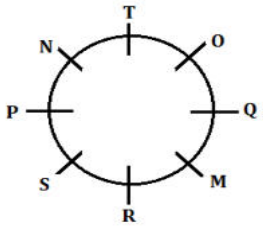
34. (d); **35. (c);** **36. (a);**
37. (e); **38. (e);**

39. (e); (a) does not follow because the NCR phenomenon can't be extrapolated to "most of the big cities". (b) and (d) are probable consequences. (c) shows us the other side. (e) follows from the mention of "slump in home sales" and scope for "price correction".

40. (e); Decline in profit will lead to closure of the company, so option a) is not valid. Establishment of new branches by the MNCs will lead to upsurge in the hiring activities. At the same time, maintenance of positive growth rate by the Indian MNC companies will help them expand their business. So only B) and C) follow.

Directions (41-45):

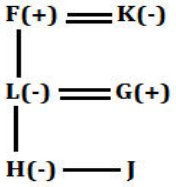
41. (e); From I and II it is clear that N sits opposite to M.



42. (e); From I and II it is clear that U gets the lowest rank.
V > X > W > Y > Z > U

43. (d); From I and II it is not clear that who **sits between E and K.**

44. (d); From I and II J's gender is not clear so we can't define how J is related to F.



45. (b); From II it is clear that D is the lightest.
B > C > A > E > D

Directions (46-50):

Month	Person 1	Person 2	Person 3
January	R (11)	U (29)	P (30)
June	T (25)	V (26)	S (27)
December	X (16)	W (18)	Q (19)

46. (c); **47. (e);** **48. (d);**
49. (c); **50. (e);**

Direction (51-55):

51. (a); **I.** R< Q (True) **II.** F > T (False)

52. (e); **I.** D = W (True) **II.** D > E (True)

53. (c); **I.** W < F (False) **II.** Q = F (False)

54. (a); **I.** O > K (True) **II.** L > D (False)

55. (b); **I.** G > Z (False) **II.** C > U (True)

Direction (56-60):

Words	Codes
very	sd
heavy	cg
rain	rv
weight	jn
boxer	yh
high	az

56. (b); **57. (d);** **58. (b);**
59. (c); **60. (d);**

QUANTITATIVE APTITUDE

Directions (61-65):-
Here, total number of persons who play cricket=43 % of 800=344
total number of persons who play football=52.5 % of 800=420
total number of persons who play Hockey=55 % of 800=440
number of persons who play both cricket and football but not Hockey=96
number of persons who play both cricket and hockey but not football=100
number of persons who play both hockey and football but not cricket=88
number of persons who play all the three sports=60
number of persons who play only cricket=344
– (96+100+60) = 88
number of persons who play only football
= 420 – (96+88+60) =176
number of persons who play only hockey
= 440 – (100+88+60) = 192

61. (b); number of persons who plays at least 2 sports=100+96+88+60= 344
Required percentage=$\frac{344}{800}$× 100 = 43 %

62. (c); number of persons who play only football =420 – (96+88+60) =176
number of persons who play only hockey =440 – (100+88+60)= 192
Required difference= 192 -176 =16

63. (d); Number of persons who plays neither football nor cricket=800 –(88+100+60+96+88+176)
=800 -608 =192

64. (a); number of persons who play both cricket and football but not Hockey=96
number of persons who play both hockey and football but not cricket=88
Required ratio=$\frac{96}{88}$=12:11

65. (d); number of persons who play only football
= 420 –(96+88+60) =176
number of persons who play both cricket and hockey but not football=100
Required percentage= $\frac{176-100}{100}$×100 =76 %

66. (d); $?\,\%\ of\ 25\%\ of\ 40\%\ of\ (144+6) = 2.25$
$?\,\%\ of\ 25\%\ of\ 40\%\ of\ 150 = 2.25$
$?\,\%\ of\ 25\%\ of\ 60 = 2.25$
$?\,\%\ of\ 15 = 2.25$
$? \approx 15$

67. (a); $(8)^3 + (8)^2 = -100 + (?)^2$
$512 + 64 + 100 = (?)^2$
$? \approx 26$

68. (e); $\frac{33\times42\times5}{11\times15} + 14 = ?\% \ of \ 280$
$? \approx 20$

69. (d); $97 + 997 - 100 + 1000 + 6 = 400 \times ?$
$? \approx 5$

70. (e); $10\% \ of \ 300 = (?)^3 + (?)$
$30 = (?)^3 + (?)$
$? \approx 3$

71. (e); Let the current age of father and mother be 'x' yrs and 'y' yrs respectively.
Then son's present age $=(x-28) yrs$
Then daughter's present age$= (y-26) yrs$
Atq
$(x + y + x - 28 + y - 26) = 130$
$(x + y) = 92 \ldots . (i)$
Again after 3 yrs
$(x + 3 + y + 3 + x - 25) = 123$
$(2x + y) = 142 \ldots . (ii)$
On solving the above equation we get $y = 42 \ years$.
Mother's present age$= 42 \ yrs$.

72. (b); SP of article (to customer) = 3000 – 300 = Rs. 2700
Marked price = $2700 \times \frac{100}{90} = Rs. 3000$
CP of article = $2700 \times \frac{100}{120} = Rs. 2250$

73. (d); speed = $1 \times \frac{5}{18} \times 60 = \frac{50}{3} \ m/min$
Time taken to reach station (time to catch train) = $\frac{500}{\frac{50}{3}} = 30 \ min$
Time left to catch train = 30 – 4 – 4 = 22 min
In this time, he is going back to home and has to reach station
Total distance to be covered = $500m$
Required speed = $\frac{500}{22} \times \frac{60}{1000} = 1.36 \ kmph$

74. (c); let radius be r cm
$132 = 2 \times \frac{22}{7} r \Longrightarrow r = 21 \ cm \Rightarrow l = 42 \ cm$
Let length, breadth of rectangle be l, b cm respectively
Square is attached along breadth of rectangle, edge of square = b cm
Increase in area = area of square
$b^2 = 144 \Rightarrow b = 12 \ cm$
Area of rectangle = $lb = 42 \times 12 = 504 \ cm^2$

75. (d); We do not know the number of girls in reasoning. So, we can't determine the no. of boys in reasoning for that years.

76. (b); Required percentage
$\Rightarrow \frac{40,000}{400000} \times 100 = 10\%$

77. (e); Required number of students
$\Rightarrow (5 + 35 + 15 + 15 + 20 + 5) \times 1000 = 95000$

78. (d); Required percentage
$\Rightarrow \left(\frac{15+30}{55+85}\right) \times 100$
$\Rightarrow \frac{45}{140} \times 100 \approx 32\%$

79. (a); Required ratio
$\Rightarrow (25 + 30) : (5 + 20)$
$\Rightarrow 55 : 25 = 11 : 5$

80. (c); Total milk in mixture = $384 \times \frac{15}{32} = 180$ liters
Total water in mixture = $384 \times \frac{17}{32} = 204 \ liters$
ATQ –
$\frac{180 - X \times \frac{15}{32} + (X-14)}{204 - X \times \frac{17}{32} + (X-34)} = \frac{1}{1}$
$180 - X \times \frac{15}{32} + (X - 14) = 204 - X \times \frac{17}{32} + (X - 34)$
$\frac{X}{16} = (24 - 20)$
X = 64 liters
Total final mixture = $180 - 64 \times \frac{15}{32} + (64 - 14) + 204 - 64 \times \frac{17}{32} + (64 - 34)$
= 200 + 200 = 400 liters
Required percentage = $\frac{180}{400} \times 100 = 45\%$

81. (a); Ratio of profit of Anurag & Ravi after one year
$= (2000 \times 8 + 2400 \times 2) : (1600 \times 12)$
= 208 : 192
= 13:12
Let total profit = 25P Rs.
Share of Ravi = 12P
Equivalent CI of two years at 20% = $20 + 20 + \frac{20\times20}{100} = 44\%$
ATQ –
$12P \times \frac{144}{100} = 6912$
P = 400 Rs.
Profit share Anurag = $10000 \times \frac{13}{25} = 5200 \ Rs.$

82. (b); Let the efficiency of a man be m units/day and efficiency of a woman be w units/day
ATQ
$(8m+10w) \times 15 = (10m + 18w) \times 10$
$\frac{m}{w} = \frac{3}{2}$
Total work= $(8\times3+10\times2) \times 15 = 660 \ units$
Work done in 10 days= $(4\times3+5\times2) \times 10 = 220 \ units$
Let the number of more women required be x
Then $2 \times (5 + x) \times 11 = 440$
x=15

83. (d); ATQ -

$2(A + B) = 6C$

$A + B = 3C$

Also given, $A + B + C = \frac{1}{9}$

$4C = \frac{1}{9}$

$C = 36$ hours

84. (a); ATQ –

$2304 = 1600\left(1 + \frac{R}{100}\right)^2$

$\frac{48}{40} = \left(1 + \frac{R}{100}\right)$

$R = 20\%$

New rate = $(20 - 8) = 12\%$

Required interest = $\frac{1600 \times 12 \times 2}{100} = 384\ Rs.$

85. (c); Let total male & female registered voters in village -X be 10a & 10b respectively.

ATQ,

$10a - 10b = 2000$

$a - b = 200$ ... (i)

And,

$7a + 4.5b = 6000$ ... (ii)

On solving (i) & (ii), we get:

$a = 600, b = 400$

So, total registered voters in village – X = $10a + 10b = 10 \times (600 + 400) = 10000$

86. (b); Missing number = 450

Pattern of series –

120 60 60 90 180 [450]

×0.5 ×1 ×1·5 ×2 ×2.5

87. (d); Missing number = 178

Pattern of series –

[178] 190 210 238 274 318

+12 +20 +28 +36 +44

+8 +8 +8 +8

88. (e); Missing number = 130

Pattern of series –

112 [130] 166 238 382 670

+18 +36 +72 +144 +288

×2 ×2 ×2 ×2

89. (a); Missing number = 354

Pattern of series –

138 210 66 282 −6 [354]

+72 −144 +216 −288 +360

72 72 72 72

90. (b); Missing number = 110

Pattern of series –

72 80 71 135 [110] 326

+8 −9 +64 −25 +216

$(2)^3$ $(3)^2$ $(4)^3$ $(5)^2$ $(6)^3$

ENGLISH LANGUAGE

91. (e); The correct answer here is option (e). Option (a) is mentioned in first paragraph of the passage. Second and third options can be deduced from paragraph 2 and 3 .Option (d) is given in paragraph 4 .Hence all of the given options are correct.

92. (c); The appropriate option is (c). Refer to paragraph 2 where it is stated that top talent outside has many options of public service. Therefore the government must proactively identify and approach executives with the desired skills and experience. *"Precisely because the competition for talent is so intense, most successful corporations — even those regarded as highly desirable employers — follow this strategy."*

93. (d); The most suitable choice here is option (d). The answer can be deduced from paragraph 1 itself where it is mentioned in the first line that most governments and CEO's are struggling with the challenge of getting the right leadership talent. Rest all of the options are wrong in context of the passage.

94. (e); Option (e) is the appropriate choice here. The answer can be inferred from paragraph 3 where the text is quoted as, "Government bureaucracy can be tough on outsiders; it is essential to have the ability to persevere in the face of constant pulls and pressures and aligning multiple stakeholders".

95. (b); Option (b) is the correct choice here. Refer to paragraph 3 , second last line , *"More focused interviews should be supplemented with extensive referencing with finalist candidates. This combination of data will provide insight into a candidate's character, integrity and moral compass — all critical qualities for government roles."* This has been mentioned in the context of how one-on-one or two-on-one interviews allow for a much more meaningful exploration of key points of a candidate's career, their mindset and approach rather than appearing before a section panel of three to five interviewers while hiring.

96. (c); Grappling means engage in a close fight or struggle without weapons.
Contending means the same.
Unfettering means releasing from restraint or inhibition.
Extricating means free from a constraint or difficulty.

97. (b); Proactively means by taking action to control a situation rather than just responding to it after it has happened.
Preemptively means taken as a measure against something possible, anticipated, or feared. Hence option (b) is the answer.
Inertly means sluggish in action or motion.
Retroactively means with effect from a date in the past.
Irresolutely means lacking in resolution; undecisive.

98. (b); Resilience means the capacity to recover quickly from difficulties. Pliability means flexibility which means the same.
Obduracy means of the quality of being stubborn.
Frailty means the condition of being weak and delicate.
Tenacity means the quality or fact of being very determined; determination.

99. (e); Primed means something prepared already for a situation.
All words in the options are the synonyms of the given word.
Only option (e) is the answer as impulsive means acting or done without forethought.

100. (c); Leveraging means use something to maximum advantage.
Clouting means hitting someone or something hard.
Esteeming means respecting and admiring.
Dissuading means persuade (someone) not to take a particular course of action.
Hence only option (c) is the answer.

101. (c); There is grammatical error in part (c) of the given sentence. The use of 'result' here is incorrect because the subject of the given sentence is 'Infection' which is singular, so the verb should also be in its singular form. So the correct verb should be 'results'. Hence, the correct answer choice is (c)

102. (e); There is no error in the given sentence. So, the correct answer choice would be (e) i.e. No error

103. (b); There is grammatical error in the part (b) of the given sentence. The use of 'shoot' here is incorrect instead use 'shot' because in Passive Voice with 'be' we use V^3. Hence, the correct answer choice would be (b)

104. (d); There is grammatical error in part (d). Replace 'start' by 'started' as part (c) of the sentence uses '**could have**'. "**Have/has/had**" is followed by V3 form of the verbs. Hence "could **have taken** ..... and **started**..." is the correct usage. So the correct answer choice is (d)

105. (c); There is grammatical error in part (c) of the sentence. To make the given sentence correct Use 'when' in place of 'that' as "**Scarcely/Hardly**" is followed by '**when'** or '**before'** in a correct grammatical usage. Hence, the correct answer choice is (c)

106. (d); 'specific' is the correct word that fits to the blank as the word before blank (narrow) is pointing to a particular question. All other options are irrelevant.

107. (e); The phrase here is ".....their free time". We cannot use 'unite', 'procure', 'store' or 'gather' for time. Hence 'increase' is the correct word that fits in the blank and hence is the correct option.

108. (a); The observations are given in the paragraph which suggested that data are recorded and not fabricated or procrastinated (means prediction) or posted. Hence 'recorded' is the correct word that completes the sentence.

109. (b); The paragraph is about spending money for buying free time. Hence 'spend' is the correct word that justifies the sentence. All other options are irrelevant.

110. (d); This is the paragraph telling us about the study of researchers. Hence 'study' is the word that is making the sentence meaningful.

111. (c); A question has been asked before the blank and the response of that question is divided into half. Hence 'split' makes the sentence complete and meaningful.

112. (d); The given sentence is grammatically as well as contextually incorrect. To frame a meaningful sentence, 'Americans' and 'countries' should be interchanged. It should be noted that the preposition ***in*** is used to denote a place rather than persons. Therefore, "in foreign countries" is a more suitable phrase. Hence, by swapping words (A) and (D), option (d) becomes the most suitable answer choice.

113. (b); The given sentence is grammatically as well as contextually incorrect. To frame a meaningful sentence, 'spilling' and 'contains' should be interchanged. It should be noted that ***spilling over*** is a phrasal verb which means to reach or influence a larger area; spread. Hence, by swapping words (B) and (D), option (b) becomes the most suitable answer choice.

114. (a); The given sentence is grammatically as well as contextually incorrect. To frame a meaningful sentence, 'government' and 'parademics' should be interchanged. Hence, by swapping words (A) and (B), option (a) becomes the most suitable answer choice.

115. (b); The given sentence is grammatically as well as contextually incorrect. To frame a meaningful sentence, 'global' and 'bears' should be interchanged. Hence, by swapping words (B) and (C), option (b) becomes the most suitable answer choice.

116. (e); The correct sequence of sentences after the rearrangement is **CEBADF**. Hence, **option (e)** becomes the most suitable answer choice.

117. (a); The correct sequence of sentences after the rearrangement is **CEBADF**. Hence, **option (a)** becomes the most suitable answer choice.

118. (d); The correct sequence of sentences after the rearrangement is **CEBADF**. Hence, **option (d)** becomes the most suitable answer choice.

119. (c); The correct sequence of the sentences after the rearrangement is **CEBADF**. Hence, **option (c)** becomes the most suitable answer choice.

120. (b); The correct sequence of sentences after the rearrangement is **CEBADF**. Hence, **option (b)** becomes the most suitable answer choic

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REASONING ABILITY

Direction (1-5): Study the following information carefully and answer the given questions

Twelve persons A, B, C, D, E, F, G, H, I, J, K, L are sitting around a circular table. They like either mango or litchi. The ones who like litchi are facing away from the centre except G and the ones who like mango are facing towards the centre except F. Not more than two persons liking same fruit sit together. Four persons sit between L and E, who likes mango. Both neighbors of E like litchi. J is one of the neighbor of C and faces inside. G and F sit immediate right to each other and one of them is neighbor of L. H is neighbor of both D and K. Both neighbor of A are facing outside. C sits 3rd to the right of D, who sits 2nd to the right of the one who likes mango. Four persons sit between F and K, when counted from left to K. B does not sits next to A. H likes litchi. Four persons sit between D and L, when counted from the right of D.

1. What is the ration of the persons liking litchi to the persons liking mango?
(a) 5:1 (b) 1:4 (c) 1:2
(d) 1:1 (e) none of these

2. Which of the following pair represents the persons sitting next to I?
(a) L,J (b)A,E (c)D,H
(d) B,C (e) none of these

3. Who among the following likes mango?
(a) B (b) I (c) F
(d) K (e) none of these

4. Which of the following fruit is liked by the one who sits 5th to the left of G?
(a) mango
(b) litchi
(c) can't be determined
(d) the one which is liked by C
(e) both (a) and (d)

5. How many people are sitting between B and H, when counted left to B?
(a) four (b) three (c) two
(d) one (e) none

Directions (6-10): Study the given information and answer the questions:

When a word and number arrangement machine is given an input line of words and numbers, it arranges them following a pattern in a each step. The following is an illustration of input and its rearrangement.

Input: 16 university 35 texas 50 houston 72 knowledge 81 petroleum

Step I: 324 16 35 texas 50 houston 72 knowledge petroleum niversit
Step II: 144 324 16 35 50 houston knowledge petroleum niversit exa
Step III: 200 144 324 16 35 houston knowledge niversit exa etroleu
Step IV: 105 200 144 324 16 houston niversit exa etroleu nowledg
Step V: 48 105 200 144 324 niversit exa etroleu nowledg ousto
Step V, is the last step of the above arrangement as the intended arrangement is obtained.
As per the rules followed in the given steps find out the appropriate steps for the given input.

Input: 24 member 41 history 75 environment 58 general 33 science

6. In which of the following step the elements "24 environment general 33" found in the same order?
(a) Step I (b) Step IV (c) Step III
(d) Step II (e) no such step

7. Which of the following is the last step of the arrangement?
(a) 96 99 82 116 225 cienc embe istor enera nvironmen
(b) 96 99 82 116 225 embe istor cienc enera nvironmen
(c) 96 66 82 116 225 embe istor cienc enera nvironmen
(d) 96 99 82 225 116 embe istor cienc enera nvironmen
(e) None of these

8. In step II, '24' is related to 'environment' and 'general' is related to 'embe'. In the same way 116'' is related to?
(a) 225 (b) 41 (c) 33
(d) 24 (e) None of the above

9. What is the sum of all the numbers in step IV in the given arrangement?
(a) 543 (b) 586 (c) 546
(d) 646 (e) none of these

10. How many steps are required for the given arrangement?
(a) 4 (b) none of these
(c) 5 (d) 2 (e) 3

Directions (11-15): In these questions, a relationship between different elements is shown in the statements. The statements are followed by two conclusions. Given answer

If A1B means A is not greater than B
A2B means A is not greater than or equal to B
A3B means A is not smaller than B
A4B means A is not smaller than or equal to B
A5B means A is not greater than or smaller than B

11. Statement: C 3 D 4 E 5 M 2 J 5 L
Conclusion: I. L 4 E II. C 3 J
(a) if only conclusion I is true.
(b) if only conclusion II is true.
(c) if either conclusion I or II is true.
(d) if neither conclusion I nor II is true.
(e) if both conclusions I and II are true.

12. Statement: P 5 N 1 Q 4 R 4 T 5 S
Conclusion: I. N 3 S II. P 1 Q
(a) if only conclusion I is true.
(b) if only conclusion II is true.
(c) if either conclusion I or II is true.
(d) if neither conclusion I nor II is true.
(e) if both conclusions I and II are true.

13. Statement: J 3 P 5 I 3 M 2 T 3 V 4 H
Conclusion: I. M 1 J II. H 1 M
(a) if only conclusion I is true.
(b) if only conclusion II is true.
(c) if either conclusion I or II is true.
(d) if neither conclusion I nor II is true.
(e) if both conclusions I and II are true.

14. Statement: M 1 X 1 E 4 F 5 D 2 O 2 K 5 G
Conclusion: I. D 4 M II. K 1 E
(a) if only conclusion I is true.
(b) if only conclusion II is true.
(c) if either conclusion I or II is true.
(d) if neither conclusion I nor II is true.
(e) if both conclusions I and II are true.

15. Statement: M 1 X 1 E 4 F 5 D 2 O 2 K 5 G
Conclusion: I. M 1 E II. G 4 F
(a) if only conclusion I is true.
(b) if only conclusion II is true.
(c) if either conclusion I or II is true.
(d) if neither conclusion I nor II is true.
(e) if both conclusions I and II are true.

Directions (16-20): Study the following information carefully and answer the question given below-

Ten people i.e. A, B, C, D, E, P, Q, R, S and T are seating on two parallel rows. P, Q, R, S, and T are seating in row 1 and facing towards north. A, B, C, D and E are seating in row 2 and facing south. Persons who are facing north like fruits and Persons who are facing south like flowers.

The one who likes orchid faces the one who sits immediate left of Q who likes guava. A sits at one of the extreme end of the row and likes lily. Only two persons sit between the one who face A and the one who likes grapes. D sits second to the left of E. P likes mango and faces A. The one who likes apple sits third to the left of the one who faces the one who likes jasmine. R sits second to the left of S and faces the one who likes rose. C sits at one of the positions to the right of the one who likes marigold. One of these person likes banana. Neither E nor D face the one who likes grapes.

16. Who among the following likes Jasmine?
(a) A (b) E (c) C
(d) D (e) None of these

17. The one who likes Banana faces the one who likes?
(a) Rose (b) Marigold (c) Orchid
(d) Lily (e) None of these

18. S likes which of the following Fruit?
(a) Grapes (b) Apple (c) Guava
(d) Mango (e) None of these

19. Who among the following sits at extreme end?
(a) the one who likes Apple
(b) B
(c) The one who likes Guava
(d) the one who likes rose
(e) R

20. Who among the following faces the one who likes orchid?
(a) T
(b) the one who likes mango
(c) S
(d) The one who likes banana
(e) None of these

Directions (21-23): In making decisions about important questions, it is desirable to be able to distinguish between 'strong' arguments and 'weak' arguments. 'Strong' arguments are those which are important and directly related to the question. 'Weak' arguments are those which are of minor importance and also may not be directly related to the question or may be related to a trivial aspect of the question. Each question below is followed by two arguments numbered I and II. You have to decide which of the arguments is a 'strong' argument and which is a 'weak' argument. Give answer-

(a) If only Argument I is strong
(b) If only Argument II is strong
(c) If both Argument I and II are strong
(d) If neither Argument I nor II are strong
(e) If either Argument I or II are strong

21. Statement: Keeping in consideration the longevity of life in India, should the age limit for retirement in government jobs be increased?
Arguments:
I. Yes, other countries have decided so long before.
II. Yes, it is the actual demand of lakhs of employees.

22. Statement: Are educational institutions responsible for unrest among the youth?
Arguments:
I. Yes, there is no discipline in educational institutions.
II. No, there is no disciplinary problem in educational institutions.

23. Statement: Should the organisations like the UNO be abolished?
Arguments:
I. the cold war is going to an end so there is no role of such organisations.
II. No, in the absence of these organisations, there may be a world war.

Directions (24-25): On the basis of given statements answer the following question:
All good athletes want to win and all athletes who want to win, eat a well-balanced diet. Therefore, all athletes who do not eat a well-balanced diet are bad athletes.

24. If assumptions of the argument above are true, then which of the following statements must be true?
(a) No athlete who does not eat a well-balanced diet is a good athlete.
(b) No bad athlete wants to win.
(c) Every athlete who eats a well-balanced diet is a good athlete.
(d) All athletes who want to win are good athletes.
(e) None of these

25. Which of the following if true, would refute the assumptions of argument above?
(a) Bob, the accountant, eats a well-balanced diet, but he is not a good athlete.
(b) Ann wants to win, but she is not a good athlete.
(c) All the players on the Burros baseball team eat a well-balanced diet.
(d) Cindy, the basketball star, does not eat a well-balanced diet, but she is a good athlete.
(e) None of these

Directions (26-30): Each of the questions below, consist a question and two statements numbered I and II. You have to decide whether the data provided in the statements are sufficient to answer the question. Read the two statements and Give answer
(a) If the data in statement I and II together are sufficient to answer the question
(b) If the data in statement I and II together are not sufficient to answer the question
(c) If the data in statement II alone sufficient to answer the question, while the data in statement I are not required to answer the question.
(d) If the data in statement I alone sufficient to answer the question, while the data in statement II are not required to answer the question.
(e) Either data in statement I or II is alone sufficient to answer the question.

26. In which direction is A from F?
Statements:
I. A is to the west of B.D is south of E, who is west of F.D is south east of B.
II. B is north of C.C and D lie on the same line.

27. What will be the code for "conductor"?
Statements:
I. "quota bus conductor classic" is coded as - "us to dc se"
"march high conductor classic " is coded as - "mn dc se gh"
II. "document fly high bus" is coded as - "lt lo gh us"
"quota fly bus talent " is coded as - "lo us to ln"

28. In a row certain number of persons are sitting. What is the total no. of persons in the row?
Statements:
I. Position of Raman from left side of the row is 21st and position of Aman from right side of the row is 29th.
II. Raman is 23rd form the left end and 14th form the right end .

29. Five Racers i.e. A, B, D, E and F who participated in a car race. Twenty minutes after the start of the race, they were at certain distance to each other. Who among the following is 2nd in the race (20 min after the start of the race?
Statements:
I. E is 18m ahead D. B is 10m behind F.
II. D is 4m behind F, who is 15m behind A.

30. Typist Q, R, S, V, T are typing. Who amongst the five of them types the fastest?
Statements:
I. Q types faster than R but not as fast as V. S types faster than V.
II. T types faster than R but not as fast as V.

Directions (31-35): Study the information carefully and answer the questions given below.
There are five married couples in a family who have only one child. C, G, F, E, and D are child and they are of different ages (in years) i.e. 5, 7, 12, 18, 21 (not necessarily in same order) and like different colour Blue, Red, Green, Pink and Yellow.

S is a female member of the family and is not married to Q and T. Q and T are male members of family. B is married to O; whose child is not G. The one who likes blue colour 2 years younger than the one who likes yellow colour. U is a female member. T's child age is 12. Y is a father of D, who is not a child of S. G is youngest and is a child of Z. M is not female. R's and O's gender is same. E is not child of T and likes red colour. Difference between the ages of U's child and M's child is not less than 10. Neither S's child and U's child is of 18 years old. M's child is older than R's child. C's age is not an even number. One of them whose age is an odd numbered like pink colour.

31. What is the age of S's child?
(a)5 years (b)18 years (c)21 years
(d)12 years (e)None of these

32. Who among the following is child of R?
(a)D (b)C (c)G
(d)F (e)None of these

33. Y is married to whom and who is the child of B?
(a) U, F (b) U, E (c) O, E
(d) Z, F (e) None of these

34. Which of the following combination is true regarding the given arrangement?
(a) M-S-C-12 (b) Q-Z-F-12 (c) T-R-F-12
(d) B-O-E-7 (e) None of these

35. Who among the following is not a married couple?
(a) Z,Q (b) T,R (c) U,Y
(d) T,O (e) None of these

Directions (36-40): In each of the questions given below some conclusions have been given followed by some sets of possible statements. You have to take the given conclusions to be true even if they seem to be at variance from commonly known facts. Read all the statements and then decide from which of the following sets of statements, both the given conclusion can be deduced disregarding commonly known facts.

36. Conclusions: **I.** Some ink is set.
II. Some glue is ink.
Statements:
I. All paper is glue. Some paper in ink. No set is paper.
II. Some paper is set. Some ink is glue. All glue is set.
(a) Only I follow
(b) Both I and II follows
(c) Only II follow
(d) None follows
(e) None of these

37. Conclusion:
I. Some new is not gold.
II. Some yellow being new is a possibility.
Statements:
I. Some silver is new. Some silver is yellow. No silver is gold. Some gold is yellow.
II. Some gold is new. All new is yellow. Some yellow is silver.
(a) Both I and II follows
(b) Only I follow
(c) None follows
(d) Only II follow
(e) None of these

38. Conclusion:
I. Some moon is star.
II. All sun is galaxy.
Statements:
I. All moon is galaxy. Some galaxy is sun. No sun is star. No star is moon.
II. Some moon is sun. Some sun is star. All star is galaxy.
(a) Only I follow
(b) Only II follow
(c) None follows
(d) Both I and II follows
(e) None of these

39. Conclusion:
I. Some cake is namkeen.
II. No toffee is namkeen.
Statements:
I. All biscuit is toffee. Some toffee is cake. No namkeen is biscuit.
II. Some toffee is cake. Some cake is biscuit. All namkeen is biscuit.
(a) Only I follow
(b) Only II follow
(c) None of these
(d) Both I and II follows
(e) None follows

40. Conclusion:
I. Some view is seen.
II. Some seen is fresh.
Statements:
I. Some seen is view. Some fresh is seen. All air is fresh.
II. All view is seen. All seen is fresh. Some fresh is air.
(a) Only II follow (b) Only I follow (c) None follows
(d) Both I and II follows (e) None of these

Direction (41-43): Read the following information carefully and answer the given question.
In a family of ten people namely- H, J, K, M, O, R, U, X, Y and Z, there are four married couple and two children. U is the only son of J. K is the mother of R. H is not the wife of Y. U is brother in-law of Z, who is not the father of O. X is the father of M. Y is the son in-law of X. O is the grandson of X.

M is sister in-law of H. R is the daughter of Z. X has three children. O is the son of H. J is mother in-law of Z. U is not the husband of M.

41. Who among the following is the husband of H?
(a) Z (b) Y (c) X
(d) U (e) O

42. Who among the following is the cousin of R?
(a) H (b) U (c) O
(d) Y (e) M

43. How is X related to Y?
(a) Father in-law
(b) Mother in-law
(c) Sister in-law
(d) Brother in-law
(e) None of these

Direction (44-46): Read the following information carefully and answer the given question.

Point E is 8m to the west of Point F, which is 4m to the north of Point G. Point I is 11m to the north of Point H, which is 8m to the east of Point G. Point K is 4m to the south of Point of J, which is 8m to the west of Point I. Point L is 4m to the west of Point K. Point C is 4m to the east of Point F.

44. If point A is 4m to the south of point I, and point B is 4m to the north of point H, then what is the shortest distance between point C and point A?
(a) 5m (b) 6m (c) 7m
(d) 11m (e) Can't determined

45. In which direction point K is with respect to point H?
(a) South-east (b) North-west (c) North
(d) West (e) North-east

46. What is the distance between point F and point K?
(a) 5m (b) 4m (c) 3m
(d) 6m (e) 8m

Directions (47-50): Study the following information carefully to answer the questions given below.

Statement: Some preferences in India are based on patriarchal customs and traditions and the patrilineal form of inheritance, where the inheritance is obtained through the common male ancestors and the sons inherit more than the daughters. Among the Hindus, it is largely believed that only a son can light the funeral pyre and offer prayers to ancestors, that the son remains a part of the family whereas the daughter becomes a part of another family, that Kanyadaan (giving away of a daughter in marriage) is a necessary spiritual obligation, and that only a son can provide old-age security.

47. Which of the following can be an assumption in the above passage?
(a) India has a patriarchal society.
(b) In Indian families, females are persecuted.
(c) All the daughters are not given away in marriage.
(d) Those families which beget no son face social opprobrium.
(e) None of these

48. Which of the following statements weakens the idea expressed in the above passage?
(a) Today many girls in India are opting for love marriage.
(b) Women in India are largely uneducated and backward in outlook.
(c) Modern Girls are highly educated and they have demolished most of the traditional myths that girls are inferior to boys.
(d) There are still many pockets of India where discrimination against girls is rampant.
(e) None of these

49. Which of the following can be an inference from the above passage?
(a) The traditions of the Hindus are very discriminatory against women as compared to what is in practice in other religions.
(b) Kanyadaan is not a mandatory process for all Hindu households.
(c) There are many customs and traditions among the Hindus which weaken the position of women in India.
(d) Women are themselves responsible for their inferior position in the Indian society.
(e) None of these

50. Which of the following statements strengthens the idea expressed in the above passage?
(a) Despite all legal efforts, the position of women in Indian society is very low.
(b) Besides traditionally bestowed low position to women in India, khap panchayats and frequent *fatwas* issued by Ulemas add to the discomfiture of women.
(c) While the north-eastern and southern parts of India are matrilineal, rest of the country is patrilineal.
(d) The Hindus are more traditional than the people belonging to other religions.
(e) Both (a) and (b)

Directions (51-55): Study the following information carefully and answer the questions given below:
Five married couple in which A, B, C, D, E are males and M, N, O, P, Q females, are living in a five storey building such as lowermost floor is 1, above it is numbered 2 and so on till topmost floor which is numbered 5. C is husband of Q and both live on an odd numbered floor. A live on a floor below E but not just below. E is neither the husband of N

nor P. O is neither the wife of A nor D. B doesn't live on the uppermost floor. P live on an even numbered floor but not below the floor on which Q live. Husband of N lives just below M. B doesn't live just above the floor on which A live. O live one of the floor above P, but not immediate above. E doesn't live on an even numbered floor. M is neither the wife of A nor D.

51. Who among the following lives on floor 4th?
(a) B (b) N (c) D
(d) Q (e) E

52. Who among the following lives on same floor as P?
(a) D (b) B (c) Q
(d) A (e) M

53. Who is the wife of D?
(a) M (b) P (c) Q
(d) N (e) O

54. Four of the following five are alike in some way. Who does not belong to the group?
(a) O (b) P (c) A
(d) B (e) M

55. How many floors are between the wife of A and the husband of O?
(a) One (b) Two (c) Three
(d) Four (e) None of these

Directions (56– 57): Study the following instructions carefully and then answer the questions that follow.

56. **Statement:** Many people living in the slums of western part of the town are diagnosed to be suffering from malaria.
Courses of Action:
I. The municipal corporation should immediately announce it as an epidemic and prohibit the entry of outsiders.
II. The municipal authority should immediately make necessary arrangements to provide quick medical help to the affected people.
III. The municipal authority should take steps to shift all the people staying in the slums of western part of town to other areas.
(a) Only I follow.
(b) Only II follows.
(c) Only I and III follow.
(d) Only I, II and III follow.
(e) None of these

57. Statement: Many teachers of the local school have rendered their resignation to the principal to protest the management's decision for not implementing revised pay scales.
Courses of Action:
I. The school management should accept the resignations and appoint new teachers.
II. The school management should persuade the teachers to continue with an assurance of considering the pay hike issue.
III. The school management should approach the govt. for guidelines.
(a) None follows
(b) Both II and III follows.
(c) Only III follows.
(d) Only I follow.
(e) Only II follows.

Directions (58-60): In each question below is given a statement followed by two assumptions numbered I and II. An assumption is something supposed or taken for granted. You have to consider the statement and the following assumptions and decide which of the assumptions is/are implicit in the statement.
Give answer
(a) if only Assumption I is implicit
(b) if only Assumption II is implicit
(c) if either Assumption I nor II is implicit
(d) if neither Assumption I nor II is implicit
(e) if both Assumption I and II are implicit

58. Statement: The largest domestic airlines corporation has announced new summer schedules in which more number of flights in trunk routes are introduced.
Assumptions
I. More number of passengers may travel by this airlines corporation during summer months in trunk routes.
II. Other airlines companies may also increase the number of flights in all the sectors.

59. Statement The chairman of the company decided to hold a grand function to celebrate silver jubilee during the next weekend and invited a large number of guests.
Assumptions
I. The company officials may be able to make all the necessary preparations for the silver jubilee celebration.
II. Majority of the guests invited by the chairman may attend the function.

60. Statements The largest computer manufacturing company slashed the prices of most of the desktop models by about 15% with immediate effect.
Assumptions
I. The company may incur heavy losses due to reduction in prices of the desktop.
II. The sales of desktop manufactured by the company increases substantially in the near future.

QUANTITATIVE APTITUDE

61. Difference of length & breadth of a rectangle is equal to 24cm and ratio of area of rectangle to area of square is 5 : 9. If the perimeter of rectangle is 72 cm. find the volume of cone given that height of cone is equal to breadth of rectangle and radius is equal to side of square?(Length of rectangle is greater than its breadth)
(a) 624π cm3 (b) 726π cm3 (c) 824 π cm3
(d) 648π cm3 (e) None of these

62. Rahul & Raj start a business partnership investing Rs 12000 & Rs 14000 & another friend Abhi joined them after x months by investing Rs 8000 & Raj left the business. If profit obtained by Abhi at the end of year is Rs 1200 out of total profit Rs 10800. Then find for how many months did Abhi invest his money?
(a) 10 months (b) None of these
(c) 4 months (d) 8 months (e) 6 months

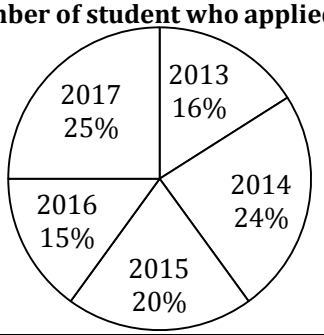
63. Archit calculates his profit% on SP & his friend Nik calculate profit % on CP. They find that the difference of profit between them is rs 450. If sp of both are same & both get 20% profit. Then find SP of each.
(a) 13500 rs (b) 14500 rs (c) None of these
(d) 12500 rs (e) 15000 rs

64. A boat travelling at 40% of its original speed covers 160 km in 8 hrs, in upstream. While returning the boat travels at 60% of its orginal speed in 4 hours. If a man travels at 50% of speed of boat in downstream. Then find the distance covered by man in upstream in 6 hrs?
(a) 160 km (b) None of these
(c) 154 km (d) 164 km (e) 168 km

65. A tank of 160 litres filled with water and rum. If 45% of water and 25% of rum is taken out it is found that the tank is now only filled with 5/8 th of the previous then find the ratio of water to rum initially ?
(a) 5 : 3 (b) 3 : 2 (c) 5 : 4
(d) 2 : 1 (e) None of these

Directions (66-70): Study the following pie-chart and answer the questions.
Pie-chart given below shows the percentage distribution of students who applied for IBPS exam in 5 different year.
And table shows the percentage of student who paid the fees by debit card.
Note: Fees is paid only through debit and credit card.

Total number of student who applied = 12 lakh



Year	% of student who paid through debit card
2013	37.5%
2014	25%
2015	62.5%
2016	42.5%
2017	20%

66. Number of students who paid their fees through credit card in year 2013 and 2014 together is how much more/less than number of students who paid through debit card in year 2015 and 2016 together ?
(a) 109500 (b) 112500 (c) 109600
(d) None of these (e) 129500

67. Number of students who paid through debit card in 2012 is equal to average of students who paid through debit card in 2016 and 2017 and students who paid through debit card is ⅔rd of total student in 2012. Then find total students in 2012 ?
(a) None of these (b) 1,04,225 (c) 1,02,375
(d) 1,22,345 (e) 1,11,320

68. Students who paid fees through credit card in 2017 is what percent of students who paid fees through debit card in 2015 ?
(a)110% (b)175% (c)125%
(d)160% (e)None of these

69. Find the average number of students who paid their fees through debit card in year 2013, 2014 and 2016 ?
(a)71250 (b)73500 (c)75300
(d)None of these (e)71750

70. If the fees is paid through credit card then each student has to pay Rs. 20 extra inclusive of fees. Then find the total extra amount paid by students in year 2015 and 2017 together ?
(a)58 lakh (b)54 lakh (c)None of these
(d)68 lakh (e)66 lakh

Directions (71-74): The following questions are accompanied by two statements(I) and(II). You have to determine which statements(s) is/are sufficient/necessary to answer the questions.
(a) Statement(I) alone is sufficient to answer the question but statement(II) alone is not sufficient to answer the questions.
(b) Statement(II) alone is sufficient to answer the question but statement(I) alone is not sufficient to answer the question.
(c) Both the statements taken together are necessary to answer the questions, but neither of the statements alone is sufficient to answer the question.
(d) Either statement(I) or statement(II) by itself is sufficient to answer the question.
(e) Statements(I) and(II) taken together are not sufficient to answer the question.

71. What will be volume of sphere.
I. Radius of sphere is half of the radius of cylinder having radius & height in the ratio of 7 : 4 and its volume is 16632 cm3.
II. Radius of sphere is equal to breadth of rectangle. Length of that rectangle is 24 cm and ratio of magnitude of perimeter to area is 23 : 84.

72. What will be average weight of all girls?
I. Average weight of 48 boys & 28 girls is 45 kg.
II. Average weight of 28 boys is 35 kg & that of remaining boys is 40 kg.

73. Find distance between A and B.
I. Man travel 60% of distance at the rate of 64 km/hr and remaining at the rate of 48 km/hr and takes total time of 8.5 hr.
II. If point B shifted 4 km towards A and average speed of man is 56 km/hr, then he takes 8.5 hr to cover distance between A and B.

74. Let x be total number of balls in a bag. Balls are of three different colors i.e. black, white and red. Calculate(x-1).
I. Probability of getting a black ball is ⅙, a red ball is ⅙ & a white ball is ⅔.
II. If one white ball is lost, probability of not getting a white ball is 8/23 and initial number of white balls in bag is less than 27.

Directions (75-79): Study the following data carefully to answer the questions that follow:

There are four schools A, B, C and D. Sum of girls in school B and boys in school D is 2600. Ratio of boys in school D to girls in school A is 7 : 8. Total students in school C is 2500 and total students in school A 12% more than total student in school C. Sum of girls in school A and C is 2600.
Difference between boys in school A and boys in school D is 200 where number of boys in school D are more than number of boys in school A. sum of total students in school B and school D is 5800. Boys in school B are $66\frac{2}{3}\%$ more than girls in school D.

75. What is the sum of boys from school B and girls from school C.
(a) 2850 (b) 3100 (c) 3000
(d) 2800 (e) 2600

76. What is the ratio of total student in school B to the total students in school D.
(a) 21 : 8 (b) 16 : 13 (c) 15 : 14
(d) 17 : 12 (e) 19 : 10

77. Total girls in school C are what percent more or less than total number of boys in school D.
(a) $27\frac{1}{7}\%$ (b) $16\frac{2}{3}\%$ (c) $26\frac{4}{7}\%$
(d) $14\frac{2}{7}\%$ (e) $28\frac{4}{7}\%$

78. What is the difference between the average of total girls from all school and average of total boys from all the schools.
(a) 275 (b) 250 (c) 260
(d) 280 (e) 285

79. If a girl is chosen at random from all the schools then find the probability that chosen girl is from school C.
(a) $\frac{1}{11}$ (b) $\frac{2}{9}$ (c) $\frac{7}{18}$
(d) $\frac{1}{5}$ (e) $\frac{1}{7}$

Directions (80-84): Find the approximate value of question marks(?) in following questions?

80. $\sqrt{63.82 \times 36.01} + 419.92 \div 5.84 - 540 = ? - 799.98$
(a) 426 (b) 378 (c) 526
(d) 328 (e) 448

81. 15.812% of 1600.125 + ? % of 1199.98 = 19.88 × 121.98
(a) 182 (b) 142 (c) 326
(d) 286 (e) 216

82. $(7.98)^3 + (14.88)^2 - (12.01)^2 = ? - 1219.812 - 1749.98$
(a) 3643 (b) 3425 (c) 3416
(d) 3563 (e) 3521

83. 19.825 × $\sqrt{?}$ = 63.91% of 399.98 + 11.95% of 1200.01

(a) 300 (b) 500 (c) 420
(d) 350 (e) 400

84. $(?)^2$ + 14.01% of 1599.98 = 59.01 × 12.025
(a) 18 (b) 28 (c) 22
(d) 36 (e) 32

Directions (85-88): Study the following table and answer the questions that follow.
Table given below shows the percentage of girls out of total students in each college. And table also shows the ratio of total boys to total students in each college.

Note-Some data are missing in the given table, find the missing data if required.

College	Ratio of boys : Total students	% of girls out of total students
X	_: 5	33 ⅓%
Y	2 : _	—
Z	_: 3	—
K	_: 7	20%
L	2 : _	—

85. If difference of total girls in college Y and total boys in college X is 420 and ratio of boys in college Y to that in college X is 1 : 2. Then find total student in college Y is how much more than total student in college X ?(Given that total student in college Y are 150% more than number of boys in college X)
(a) 420 (b) 360 (c) 450
(d) 540 (e) None of these

86. If total number of boys in college K and L together are 1050 then find the average of girls in college K and boys in college L ?(Given that total girls in K is equal to total boys in L)
(a) 270 (b) 240 (c) None of these
(d) 210 (e) 180

87. If number of boys in college X is 120. And ratio of total students in college X to that of in college Z is 3 : 4. Then find the ratio of girls in college Z to boys in college X, if total boys in college Z is 50% of total student in X ?
(a) None of these (b) 4 : 3 (c) 5 : 4
(d) 5 : 2 (e) 3 : 2

88. If average of boys in college Z & L are is 180 and girls in college Z are 40% more than girls in college L total students in college Z is what percent more/less total students in college L if total boys in both college is equal to total girls in both college & boys in college L is 20% less than girls in same college?
(a) 42.43% (b) 66.67% (c) 62.23%
(d) 72.67% (e) 33.33%

89. A question is given to Satish, Arun and Ayush. Probability that Satish, Arun and Ayush can solve the question is $\frac{1}{3}$, $\frac{2}{5}$ and $\frac{1}{2}$. Find the probability that the question will be solved ?
(a) $\frac{3}{5}$ (b) $\frac{4}{5}$ (c) $\frac{1}{5}$
(d) $\frac{1}{3}$ (e) $\frac{2}{5}$

90. Abhishek can cover a certain distance in time 'T'. If he increases his speed by 'X' km/hr then the same distance is covered in 5 hours and if he decreases his speed by 'X' then the same distance is covered in 8 hours. Find the value of T?
(a) $4\frac{2}{13}$ hr (b) $5\frac{1}{7}$ hr (c) $6\frac{2}{13}$ hr
(d) $12\frac{1}{2}$ hr (e) $8\frac{3}{11}$ hr

ENGLISH LANGUAGE

Directions (71-75): Read the following passage carefully and answer the questions given below it. Certain words/phrases have been printed in bold to help out locate them while answering some of the questions.

How many really suffer as a result of labor market problems? This is one of the most critical yet **contentious** social policy questions. In many ways, our social statistics exaggerate the degree of hardship. Unemployment does not have the same **dire** consequences today as it did in the 1930's when most of the unemployed were primary breadwinners, when income and earnings were usually much closer to the margin of subsistence, and when there were no countervailing social programs for those failing in the labor market. Increasing affluence, the rise of families with more than one wage earner, the growing predominance of secondary earners among the unemployed, and improved social welfare protection have unquestionably **mitigated** the consequences of joblessness. Earnings and income data also overstate the dimensions of hardship. Among the millions with hourly earnings at or below the minimum wage level, the overwhelming majority are from multiple-earner, relatively affluent families. Most of those counted by the poverty statistics are elderly or handicapped or have family responsibilities which keep them out of the labor force, so the poverty statistics are by no means an accurate indicator of labor market pathologies.

Yet there are also many ways our social statistics underestimate the degree of labor-market-related hardship. The unemployment counts exclude the millions of fully employed workers whose wages are so low that their families remain in poverty. Low wages and repeated

or prolonged unemployment frequently interact to undermine the capacity for self-support. Since the number experiencing joblessness at some time during the year is several times the number unemployed in any month, those who suffer as a result of forced idleness can equal or exceed average annual unemployment, even though only a minority of the jobless in any month really suffer. For every person counted in the monthly unemployment tallies, there is another working part-time because of the **inability** to find full-time work, or else outside the labor force but wanting a job. Finally, income transfers in our country have always focused on the elderly, disabled, and dependent, neglecting the needs of the working poor, so that the dramatic expansion of cash and in-kind transfers does not necessarily mean that those failing in the labor market are adequately protected.

As a result of such contradictory evidence, it is uncertain whether those suffering seriously as a result of labor market problems number in the hundreds of thousands or the tens of millions, and, hence, whether high levels of joblessness can be tolerated or must be countered by job creation and economic stimulus. There is only one area of agreement in this debate—that the existing poverty, employment, and earnings statistics are inadequate for one their primary applications, measuring the consequences of labor market problems.

71. The author contrasts the 1930's with the present in order to show that
(a) more people were unemployed in the 1930's
(b) unemployment now has less severe effects
(c) social programs are more needed now
(d) there now is a greater proportion of elderly and handicapped people among those in poverty
(e) poverty has increased since the 1930's

72. Which of the following proposals best responds to the issues raised by the author?
(a) Innovative programs using multiple approaches should be set up to reduce the level of unemployment.
(b) A compromise should be found between the positions of those who view joblessness as an evil greater than economic control and those who hold the opposite view.
(c) New statistical indices should be developed to measure the degree to which unemployment and inadequately paid employment cause suffering.
(d) Consideration showed be given to the ways in which statistics can act as partial causes of the phenomena that they purport to measure.
(e) The labor force should be restructured so that it corresponds to the range of job vacancies.

73. The author's purpose in citing those who are repeatedly unemployed during a twelve-month period is most probably to show that
(a) there are several factors that cause the payment of low wages to some members of the labor force
(b) unemployment statistics can underestimate the hardship resulting from joblessness
(c) recurrent inadequacies in the labor market can exist and can cause hardships for individual workers.
(d) a majority of those who are jobless at any one time do not suffer severe hardship
(e) there are fewer individuals who are without jobs at some time during a year than would be expected on the basis of monthly unemployment figures

74. According to the passage, one factor that causes unemployment and earnings figures to overpredict the amount of economic hardship is the
(a) recurrence of periods of unemployment for a group of low-wage workers
(b) possibility that earnings may be received from more than one job per workers.
(c) Fact that unemployment counts do not include those who work for low wages and remain poor
(d) Establishment of system of record-keeping that makes it possible to compile poverty statistics
(e) Prevalence, among low-wage workers and the unemployed, of members of families in which other are employed

75. The author uses 'labour market problems' in passage to refer to which of the following?
(a) The overall causes of poverty
(b) Deficiencies in the training of the work force
(c) Trade relationships among producers of goods
(d) Shortage of jobs providing adequate income
(e) Strikes and inadequate supplies of labour

Directions (76-80): A part of the sentence is underlined below are given alternatives to four underlined part at (a), (b), (c) and (d) which may improve the sentence choose the correct alternative and mark your answer in the answer sheet. In case no improvement is needed, our answer is (e).

76. With his sub-four minute mile Bannister broke a psychological barrier, **inspiring thousands of others to attempt overcoming** seemingly insurmountable hurdles.
(a) and inspired thousands of others to attempt overcoming
(b) inspiring thousands of others to attempt to overcome
(c) inspiring thousands of others to overcome
(d) and inspired thousands of others to attempt to overcome
(e) No improvement

77. An analysis of sixteenth century probate inventories in the major English towns **show that even some artisans and yeomen owned silver spoons, cups or** salt cellars.
(a) shows that even some artisans and yeomen owned silver spoons, cups or
(b) show that some artisans and yeomen even owned silver spoons, cups or
(c) show that even some artisans and yeomen owned silver spoons, cups and
(d) shows that some artisans and yeomen owned even silver spoons, cups and
(e) No improvement

78. The psychologist reported that **the most common problems undergraduates experience stem from a lack of self-esteem, difficulty in adjusting to university life and loneliness.**
(a) the most common problems undergraduates had experienced stem from difficulty in adjusting to university life, lack of self-esteem, and loneliness
(b) the most common problems undergraduates experienced stemmed from a lack of self-esteem, difficulty in adjusting to university life and loneliness
(c) the most common problems undergraduates experience stem from loneliness, a lack of self-esteem, and difficulty in adjusting to university life
(d) the most common problem undergraduates have experienced stems from a lack of self-esteem, loneliness, and difficulty in adjusting to university life
(e) No improvement

79. It is probable that the prototype cellular motor **might be ready for testing around the end of next year.**
(a) should be ready for testing toward the end of next year
(b) may be ready for testing about he end of next year
(c) might be ready for testing toward next year's end
(d) will be ready for testing toward the end of next year
(e) No improvement

80. Dunbar argues that **gossip is important in human societies in the maintenance of social cohesion, just as social grooming does for other primates**.
(a) gossip is important in human societies in the maintenance of social cohesion, just as social grooming is in other primate groups
(b) gossip is important in the maintenance of social cohesion in human society, just as social grooming does for other primates
(c) in human societies gossip is important in social cohesion like social grooming for other primate societies
(d) similar to social grooming in primates, human gossip is important in maintaining social cohesion
(e) No improvement

Direction (81-85): Select the phrase/connector (STARTERS) from the given three options which can be used to form a single sentence from the two sentences given below, implying the same meaning as expressed in the statement sentences.

81. (1) It may be necessary to get rid of colonial-era conventions to make administration more efficient.
(2) However, It is equally important to think through the reforms and work out a viable sequence.
(i) Getting rid of colonial-era…
(ii) To make administration…
(iii) As it is equally important…
(a) Only (i) is correct
(b) Only (ii) is correct
(c) Only (iii) is correct
(d) Both (i) and (ii) are correct
(e) All are correct

82. (1) A diversified diet that meets all nutritional requirements is difficult to provide.
(2) Fortification of food is relied upon by many countries to prevent malnutrition.
(i)Provided a diversified diet…
(ii)Since a diversified diet…
(iii)As it is difficult to provide…
(a)Only (i) is correct
(b)Only (ii) is correct
(c)Only (iii) is correct
(d)Both (ii) and (iii) are correct
(e)All are correct

83. (1) There is definitely some merit in the criticism about the imposition of dietary uniformity across the country in our eateries and restaurants.
(2) The spirit behind the move is undoubtedly praiseworthy.
(i)While there is definitely…
(ii)The imposition of dietary…
(iii)In spite of the fact that the spirit…
(a)Only (i) is correct
(b)Only (ii) is correction
(c)Both (i) and (ii) are correct
(d)Both (ii) and (iii) are correct
(e)None is correct

84. (1) It may have a logical basis about questioning a few not-so-righteous acts of judges and citing a few examples of corruption and nepotism.
(2) This cannot overwhelm the bold impartiality and character of a majority of our learned judges, reflected many times and in many situations.
(i)Despite questioning a few…
(ii) In spite of the fact that the bold impartiality …
(iii)Questioning a few not-so-righteous…
(a)Only (i) is correct
(b)Only (ii) is correct
(c)Only (iii) is correct
(d)Both (i) and (iii) are correct
(e)All are correct

85. (1) There was an early speculation about Trump and Putin sharing a warm relationship.
(2) However, it is too early to see whether the recent attack will impact President Trump's declared position of reaching out to Russia.
(i)Though there was an…
(ii)Notwithstanding that there was…
(iii)Given an early speculation…
(a)Only (i) is correct
(b)Only (ii) is correct
(c)Both (i) and (ii) are correct
(d)Both (ii) and (iii) are correct
(e)All are correct

Directions (86-90): In each of the following sentences there are blank spaces. Below each sentence there are five set of words denoted by the alphabets (a), (b), (c), (d) and (e). Find out which set of words can be filled up in the blanks in the sentence in the same sequence to make it grammatically correct.

86. It is said in the budget that _____ changes would be made in the law to bring down prices of essential drugs and health equipments. Production of generic drugs would be_____.
(a)Dispensable, stimulated
(b)Imperative, dissuaded
(c)Requisite, encouraged
(d) Superfluous, incited
(e) Essential, deterred

87. Many of the renowned off-shore universities are willing to invest in campuses abroad, and, in practice, it is hard to _____the standards of the home country in some other country. Other related problems are: returns from the investment made in _____ and running of campuses, non-repatriation of profits as mentioned, the regulatory mechanism of the host country in regard to the fee-structure, faculty salaries, curriculum to be offered, and issues pertaining to research and intellectual property rights etc.
(a)Replicate, establishing
(b) Copy, nullify
(c) Concurring, determining
(d) Duplicate, annihilate
(e) Avowal, setting up

88. Mr. Trump could either fight back or make peace. Two days after Mr. Flynn's resignation, he has signaled both. He attacked the intelligence agencies on Twitter on Wednesday, while the White House_____ that the promised détente with Russia was over. But Mr. Flynn has set in motion a process that is unlikely to be controlled by a seemingly _____ administration like Mr. Trump's.
(a)Imply, efficient
(b) Denoted, ability
(c) Abrogated, ineptitude
(d)Indicated, incompetent
(e) Refute, Inadequacy

89. It takes singular skill and acertain ruthlessness, however, to make capital of the smallest advantages, and Federer and Serena, and to a marginally_____ extent Nadal and Venus, did precisely that. Federer, who missed six months last year with an injury, knew he could not allow Nadal time and space. With his opponent looking in excellent physical condition, Federer could not _____to be drawn into long, bruising rallies;
(a)minute, reject
(b)auxiliary, sustain
(c)larger, manage
(d) lower, refuse
(e)lesser, afford

90. India's Railways serves the _____function of providing travel access to millions, and, as Mahatma Gandhi wrote in his article 'Third Class in Indian Railways', have the _____of making it equitable and comfortable. It must also be safe.
(a) Lethargic, obligatory
(b) Important, liability
(c) Vital, responsibility
(d) Essential, irresponsibility
(e) Indispensable, duty

Directions (91-95): Rearrange the following sentences (A), (B), (C), (D), (E), (F) and (G) in the proper sequence to form a meaningful paragraph; then answer the questions given below them.

A. "Strap-on motors separated", "L-110 performance normal", "heat shield separated", "plus four minutes", and "L-110 core stage separated" were the other announcements from the MCC.
B. Its performance too was normal.
C. "Strap-on motors' performance normal", "L-110 [liquid engine] ignited" came the voice from the Mission Control Centre (MCC) situated seven kilometres from the launch pad.
D. Fifteen years later, the gigantic GSLV-MkIII D1, weighing 640 tonnes, roared into the sky at 5:28 p.m. on June 5 from its launch pad at Sriharikota in what was its first developmental flight (D1).
E. Then came the announcement that everyone was waiting for: "Cryo stage ignited".
F. The heaviest rocket that ISRO has built was well and truly on its way to making history as its two strap-on motors, each guzzling 200 tonnes of solid propellants and together producing 800 tonnes of thrust, worked with gusto.
G. Finally, at the end of the mission that lasted 16 minutes and 20 seconds came the all-important announcement that "GSAT-19 [the satellite] has separated".

91. Which of the following should be the **SIXTH** sentence after rearrangement?
(a) B (b) F (c) A
(d) E (e) G

92. Which of the following should be the **FIFTH** sentence after rearrangement?
(a) A (b) D (c) B
(d) E (e) G

93. Which of the following should be the **THIRD** sentence after rearrangement?
(a) B (b) G (c) D
(d) C (e) E

94. Which of the following should be the **FIRST** sentence after rearrangement?
(a) F (b) D (c) A
(d) B (e) C

95. Which of the following should be the **SECOND** sentence after rearrangement?
(a) D (b) A (c) B
(d) F (e) E

Direction (96-100): Read the following passage carefully and answer the questions given below it. Certain words are given in bold to help you locate them while answering some of the questions.

The US government's decision to grant India the licence for the export of 22 Guardian drones through the US foreign military sales programme will address gaps in India's maritime surveillance capabilities. However, India's quest for armed drones in the absence of a defined strategy for the use of unmanned aerial vehicles (UAVs) has created misconceptions about their utility for India in conducting cross-border strikes or "surgical strikes" against Pakistan-based terrorists.

The Guardian drones, manufactured by General Atomics, will complement India's maritime surveillance aircraft at sea in intelligence, surveillance and reconnaissance, helping boost battlespace awareness and target acquisition or guide forces on suspected surface threats. The additional capability will free up the navy's Boeing P-81s for anti-submarine warfare (ASW). This will be critical given the increasing forays of Chinese submarines in the India Ocean region and India's capacity-deficit in ASW.

India's pursuit of armed drones has led it to order 10 Heron TP drones from Israel and this will likely be the highlight of Indo-Israeli defence cooperation against the backdrop of Prime Minister Narendra Modi's visit to Israel. The armed drones were purchased in 2015 for a reported $400 million. These will be India's first armed drones, significantly expanding the aerial offensive capabilities of the Indian Air Force (IAF).

The Israel Aerospace Industries' (IAI's) Heron TPs have an endurance of upwards of 30 hours, maximum take-off weight of 5,300kg and a potential weapons/mission payload of up to 1,000kg. They can be used for both surveillance as well as combat and support roles, and can carry air-to-ground missiles to take out hostile targets. The IAF currently operates a fleet of IAI-made Harpy self-destructing anti-radar drones and IAI searcher UAVs and indigenously built Nishant drones for surveillance and intelligence-gathering.

The use of UAVs permits Indian policymakers to exercise the use of force while substantially lowering the risk to military personnel and acts as a force multiplier in enhancing surveillance capabilities. This expands the variety of missions the Indian Armed Forces can conduct.

The use of unmanned systems such as drones removes potential political costs and makes it easier for policymakers to opt for "clean and quick" use of military force rather than the slow and often difficult political and diplomatic options. In India's case, the Indian military hopes that armed UAVs will give it the capability to conduct symbolic retaliatory attacks against Pakistan-based terrorists while limiting the violation of Pakistani sovereignty and hopefully avoiding any escalatory spiral.

The ideas being promulgated within the Indian military and strategic community on the successful use of armed drones for "surgical strikes",etc., is contingent on operating in a non-existent air defence environment. Put simply, if manned combat aircraft can't get to the target, neither can armed drones. The idea that New Delhi could push armed drones in a Pakistani air defence environment to conduct surgical strikes against terrorists is **ludicrous**. Reality is more constrained and requires a nuanced understanding of the operating environment.

Modern air defences are more dangerous and effective than ever before. Case in point, the US military has rarely used drones in defended or contested air spaces. Armed drones against targets in Afghanistan or Yemen have succeeded as these have undefended air spaces or in Syria and Pakistan because air defences have not been employed to target them.

To mitigate the threat to manned and unmanned aircraft from air defences, India needs long-range stand-off weapons systems along with the requisite advances in intelligence, reconnaissance and surveillance. The under-development air-launched Brahmos for the Sukhoi-30 MKI or the 300km SCALP air-to-ground cruise missiles being acquired for the yet-to-be-inducted Dassault Rafale give India more credible retaliatory options in Pakistan-occupied Kashmir vis-à-vis vulnerable and expensive armed UAVs.

This is not to say that armed UAVs will have no role in transforming the way India fights wars in the future with technological advances in automation, miniaturization, stealth, and other fields. But such capabilities, if they are to be operationalized affordably in India, require the adoption of evolved **doctrines** and specific operating concepts that enable in-tandem operations involving manned and unmanned assets. The adoption of unmanned assets for adjunct missions also potentially allows for the more efficient use of limited manned platforms.

While reports indicate the existence of a "project Ghatak", managed by the Aeronautical Development Agency and the Defence Research and Development Organization, for a stealth unmanned combat aerial vehicle (UCAV), there is little indication so far from the IAF regarding the strategic/tactical employment of UCAVs. The IAF's "Air Power Doctrine", last published in 2012, failed to once mention "unmanned" or "drone". The IAF's "Indigenization Roadmap 2016-2025" barely mentions UAVs apart from the fact that the IAF needs to possess highly autonomous strike capabilities against the full spectrum of potential targets.

Given India's complex security challenges, UAVs have the potential to play a role in enabling the Indian military not only in fighting wars but also in intelligence, reconnaissance and surveillance, and deterring cross-border terrorist attacks. Currently, however, the integration of unmanned assets, especially armed drones, with manned fighters and combined arms concepts remains at a **nascent** stage.

96. According to the passage, what are the advantages for India of having the UAV imported from USA?
(I) It will complement India's maritime surveillance aircraft at sea in intelligence, surveillance and reconnaissance.
(II) It will prevent the cross-border terrorist attacks.
(III) It will remove the potential political costs.
(IV) It will release the navy's Boeing P-81s for anti-submarine warfare (ASW).
(a) Only (I) is true
(b) Both (I) and (III) are true
(c) (I), (III) and (IV) are true
(d) (II), (III) and (IV) are true
(e) All are correct

97. Which of the following is/are the features of The Israel Aerospace Industries' (IAI's) Heron TPs?
(a) It can be used for surveillance and intelligence-gathering.
(b) It has maximum take-off weight of 5,300kg and a potential weapons/mission payload of up to 1,000kg.
(c) It can carry air-to-ground missiles to take out hostile targets.
(d) Both (b) and (c) are correct
(e) All are correct

98. What does the author mean the phrase "**Modern air defences are more dangerous and effective than ever before**"?
(I) It is very difficult to carry out operations either with manned combat aircraft or armed drones in those countries which have got better air defences.
(II) US military have effectively used their armed drones in countries like Afghanistan or Syria which have defenseless air spaces whereas they have hardly succeeded in countries where air defence is tight.
(III) Countries are now more advanced in tackling any kind of possible attacks even if it is through armed drones as they have secured their air better than ever before.
(a) Only (I) is correct
(b) Only (II) is correct
(c) Both (I) and (III) are correct
(d) Both (II) and (III) are correct
(e) All are correct

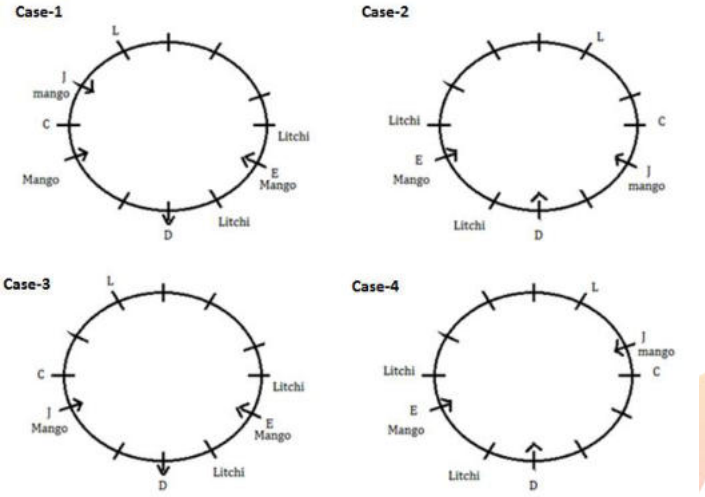
99. Which of the following sentences go(es) with the theme of the passage?
(I) Unmanned aerial vehicles have a major role to play for economy and security purposes.
(II) India requires impasse weapon system to reduce the threat to manned and unmanned aircraft from air defences.
(III) India has imported the armed drones from Israel and USA for security purposes.
(a) Only (I) is correct
(b) Only (II) is correct
(c) Both (I) and (III) are correct
(d) Both (II) and (III) are correct
(e) All are correct

100. Which of the following is the most appropriate **title** for the passage?
(a) The IAF's "Indigenization Roadmap 2016-2025"
(b) The "clean and quick" use of military force.
(c) Cross-border strikes or "surgical strikes" against Pakistan
(d) India's quest for Armed drones
(e) India's capacity-deficit in ASW (anti-submarine warfare).

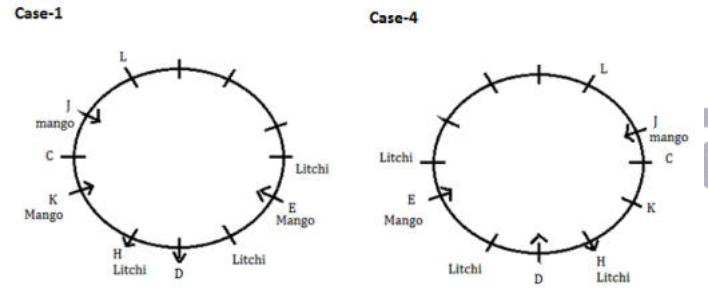
Solutions

REASONING ABILITY

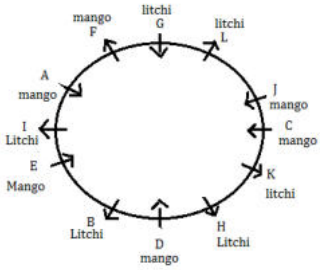
Direction (1-5):
Four persons sit between L and E, who likes mango. J is one of the neighbor of C and faces inside. C sits 3rd to the right of D, who sits 2nd to the right of the one who likes mango. Four persons sit between D and L, when counted from the right of D. Both neighbors of E like litchi.



H likes litchi. H is neighbor of both D and K., so case2 and case3 gets eliminated.



Not more than two persons liking same fruit sit together. So, D likes mango and hence face inside. So case1 gets eliminated. G and F sit immediate right to each other and one of them is neighbor of L. Both neighbor of A are facing outside. Four persons sit between F and K , when counted from left to K. B does not sits next to A. The final arrangement is:



1. (d); 2. (b); 3. (c);
4. (b) 5. (d);

Directions (6-10):
Let us understand the logic behind it- In each step the words and numbers are arranged simultaneously, the numbers are arranged from left end and the words are arranged from right.

For words- One word will be arranged in one step. The word which comes last according to alphabetical series is arranged first from right and then all others words are arranged according to alphabetical series to the right most end. The first and last letter is removed from each word whenever it is getting arranged to the right most end.

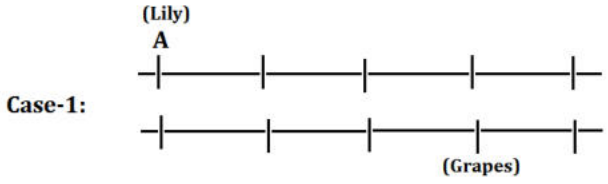
For numbers- The numbers are arranged in decreasing order. The highest number is arranged first on left end and then the 2nd highest is arranged to leftmost end in the next step. The numbers are also getting multiplied by the number of vowels in the word it is getting arranged with in the same step.

Input: 24 member 41 history 75 environment 58 general 33 science
Step I: 225 24 member 41 history environment 58 general 33 cienc
Step II: 116 225 24 41 history environment general 33 cienc embe
Step III: 82 116 225 24 environment general 33 cienc embe istor
Step IV: 99 82 116 225 24 environment cienc embe istor enera
Step V: 96 99 82 116 225 cienc embe istor enera nvironmen

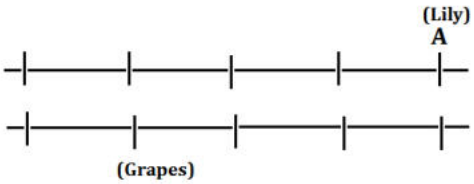
6. (c); 7. (a); 8. (b);
9. (c); 10. (c);

Direction (11-15)
11. (a) **I.** L 4 E (True) **II.** C 3 J(false)
12. (b**) I.** N 3 S(False) **II.** P 1 Q(True)
13. (a) **I.** M 1 J(True) **II.** H 1 M(False)
14. (d) **I.** D 4 M(False) **II.** K 1 E(False)
15. (e) **I.** M 1 E(True) **II.** G 4 F(True)

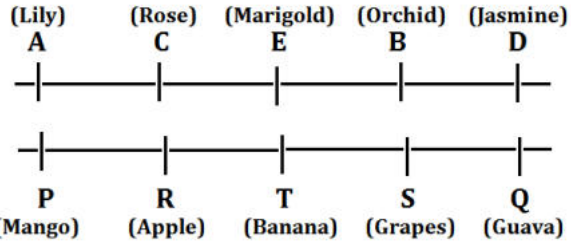
Direction (16-20):
(i) By using given conditions, A sits one of the extreme end of the row and likes lily. Only two persons sit between the one who face A and the one who likes grapes. There are two possible cases-



Case-2:



(ii) D sits second to the left of E. Neither E nor D face the one who likes grapes. That means D sits at the extreme end of the row-2 in case -1, and in case-2 E sits extreme end of the row-2. P likes mango and faces A. The one who likes apple sits third to the left of the one who faces the one who likes jasmine. R sits second to the left of S and faces the one who likes rose. C sits right of the one who likes marigold. The one who likes orchid faces the one who sits immediate left of Q who likes guava. By using these conditions case-2 will be eliminated and in case-1, E likes marigold, C likes rose and B likes orchid. Q sits immediate right of S. One of these person likes banana. Hence T likes banana.



16. (d); 17. (b); 18. (a);
19. (c); 20. (c);

Directions (21-23):

21. (b); Argument I is not strong because different countries have different culture, economy and various other factor. So, some implementations are successful in one country while failure in other country. Argument II is strong because it is the demand of lakhs of employees.

22. (d); Neither Argument I nor II is strong because none of them logically supports the statements.

23. (b); Argument II is strong because in the absence of UNO, there may be a world war.

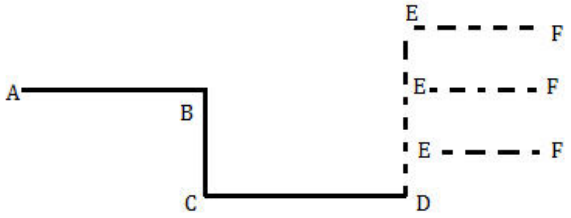
Directions (24-25):

24. (a); From the given argument, "all athletes who do not eat a well-balanced diet are bad athletes" it is clear that no athlete is a good athlete, who does not eat a well-balanced diet. However, rest three statements doesn't hold true for the given argument.

25. (d); From option (d), it is clear that, Cindy who is a basketball star doesn't eat a well-balanced diet but still she is a good athlete, therefore, this statement would straight away prove the given assumption that "all athletes who do not eat a well-balanced diet are bad athletes" of argument to be false.

Directions (26-30):

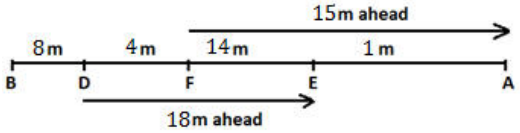
26. (b); From I and II, the exact position of E and F cannot be determined.



27. (b); From both the statements code for conductor can be either dc or se.

28. (c); From II-
The total number of persons in the row – 23 + 14 – 1=36 students.

29. (a); From I and II –



30. (a); From I and II-
S >V >Q >T >R

Directions (31-35):

(i) By using given conditions, S is a female member of the family and is not married to Q and T. B is married to O. M is not female. Y is a father of D, who is not a child of S. R's and O's gender is same. G is a child of Z. U is a female member. So, it is clear the male members of the family are- Q, T, M, Y, and B. Female members of the family are- S, U, O, R and Z. G is the youngest one and the child of Z. There is only possibility Z is wife of Q and the age of G is 5 years. Hence M is the husband of S.

Husband	Wife	Child	Child Age	Colour
M	S			
Q	Z	G	5yrs	
T				
B	O			
Y		D		

(ii) T's child age is 12. E is not child of T and likes red colour. That means E is either child of M or B.
There are two possible cases.

Case-1:

Husband	Wife	Child	Child Age	Colour
M	S			
Q	Z	G	5yrs	
T			12yrs	
B	O	E		Red
Y		D		

Case-2:

Husband	Wife	Child	Child Age	Colour
M	S	E		Red
Q	Z	G	5yrs	
T			12yrs	
B	O			
Y		D		

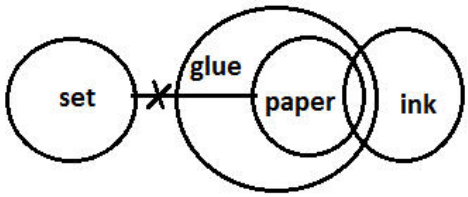
(iii) Difference between the ages of U's child and M's child is not less than 10. Neither S's child and U's child is of 18 years old. M's child is older than R's child. In case-1 and in case-2, there is only possibility U is wife of Y and R is wife of T. In both cases the age of U's Child is 7 years and age of M's child is 21. Hence age of B' child is 18 years. C's age is not an even number. By using this condition case-2 will be eliminated. In case-1 C is the child of M and F is child of R. The one who likes blue colour 2 years younger than the one who likes yellow colour. Hence G likes blue colour and D likes Yellow colour. One of them whose age is an odd numbered like pink colour. That means C likes pink colour and F likes Green colour. The final arrangement is-

Husband	Wife	Child	Child Age	Colour
M	S	C	21yrs	Pink
Q	Z	G	5yrs	Blue
T	R	F	12yrs	Green
B	O	E	18yrs	Red
Y	U	D	7yrs	Yellow

31. (c); 32. (d); 33. (b);
34. (c); 35. (d);

Directions (36-40):

36. (c); From I: The possible Venn diagram is:



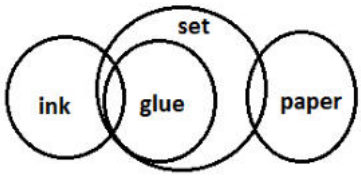
Conclusions:

I. We can't say as there is no direct relation between ink and set, thus it cannot be concluded.

II. True, as some ink is paper and all paper is glue, thus it can be concluded.

Therefore, only conclusion II can be deduced from the given set of statements, hence it doesn't follow.

From II: The possible Venn diagram is:



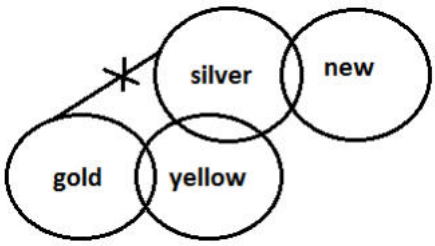
Conclusions:

I. True, as per the above Venn diagram, some ink is glue and all is glue is set so it is a definite case, thus it can be concluded from the given statements.

II. True, as some glue is ink is a definite case, hence it can be concluded from the given statements.

Therefore, both I and II conclusion can be deduced from the given set of statements, hence it follows.

37. (b); From I: The possible Venn diagram is:



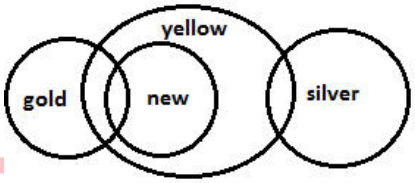
Conclusions:

I. True, as per the above Venn diagram, some new is silver and no silver is gold, therefore it can be concluded that some new is not gold.

II. True, as possibility is true and here there is indirect relation between yellow and new, therefore it can be concluded.

Therefore, both I and II conclusion can be deduced from the given set of statements, hence it follows.

From II: The possible Venn diagram is:



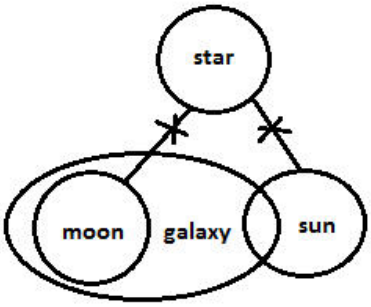
Conclusions:

I. False, as per the above Venn diagram, some gold is new is a definite case, but it is not definite that some new is not gold, hence it cannot be concluded.

II. False, as all new is yellow is a definite case, thus some new is yellow is also a definite case, so possibility case will not hold true.

Therefore, both conclusions I and II cannot be deduced from the given set of statements, hence it doesn't follow.

38. (c); From I: The possible Venn diagram is:



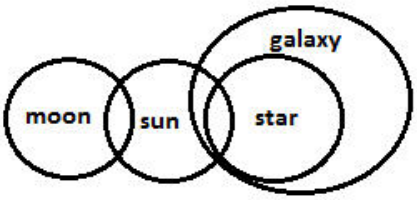
Conclusions:

I. False, as per the above Venn diagram, no moon is star is a definite case, hence it cannot be concluded that some moon is star.

II. False, as some sun is galaxy is a definite case, thus all sun is galaxy is not possible, hence it can't be concluded.

Therefore, none of the conclusion can be deduced from the given set of statements, hence it doesn't follow.

From II: The possible Venn diagram is:



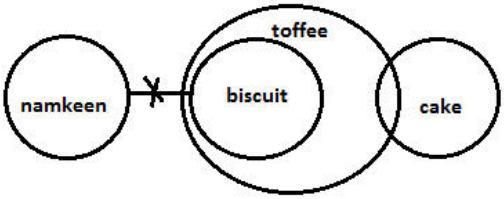
Conclusions:

I. False, as per the above Venn diagram, there is no direct relation between moon and star, hence it cannot be concluded that some moon is star.

II. False, as some sun is galaxy is a definite case, thus all sun is galaxy is not possible, hence it can't be concluded.

Therefore, none of the conclusion can be deduced from the given set of statements, hence it doesn't follow.

39. (e); From I: The possible Venn diagram is:



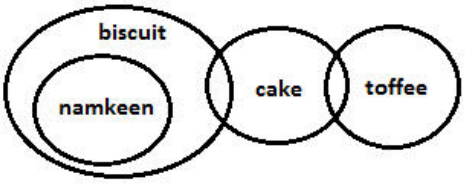
Conclusions:

I. As per the above Venn diagram, we can't say that some cake is namkeen because there is no direct relation between cake and namkeen, hence it can't be concluded.

II. We can't say as there is no direct relation between toffee and namkeen, thus we cannot conclude that no toffee is namkeen.

Therefore, none of the conclusion can be deduced from the given set of statements, hence it doesn't follow.

From II: The possible Venn diagram is:



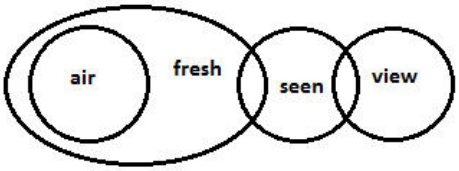
Conclusions:

I. As per the above Venn diagram, we can't say that some cake is namkeen because there is no direct relation between cake and namkeen, hence it can't be concluded.

II. We can't say as there is no direct relation between toffee and namkeen, thus we cannot conclude that no toffee is namkeen.

Therefore, none of the conclusion can be deduced from the given set of statements, hence it doesn't follow.

40. (d); **From I:** The possible Venn diagram is:



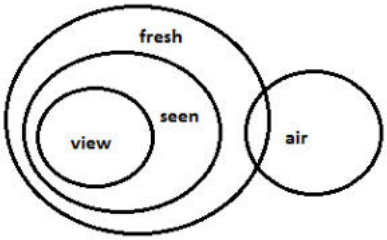
Conclusions:

I. True, as per the above Venn diagram, some view is seen is a definite case, hence it can be concluded.

II. True, as seen is fresh is a definite case, hence it can be concluded.

Therefore, both I and II conclusion can be deduced from the given set of statements, hence it follows.

From II: The possible Venn diagram is:



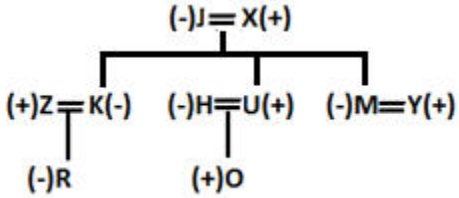
Conclusions:

I. True, as per the above Venn diagram, all view is seen thus some view is seen is a definite case, hence it can be concluded.

II. True, as all seen is fresh thus some seen is fresh is a definite case, hence it can be concluded.

Therefore, both I and II conclusion can be deduced from the given set of statements, hence it follows.

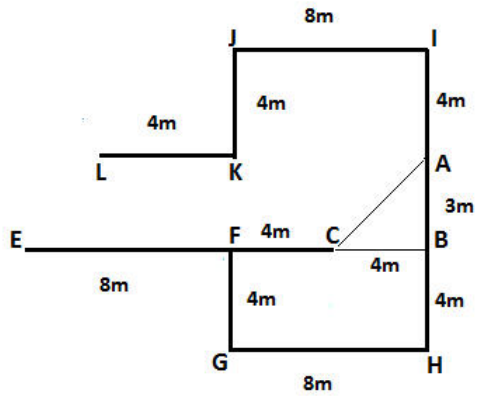
Directions (41-43):



41. (d);
42. (c);
43. (a);

Directions (44-46):

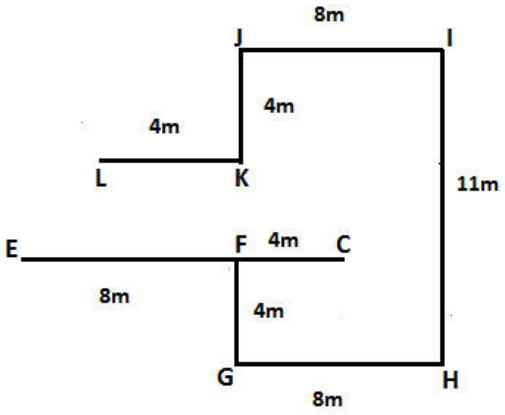
44. (a);



The shortest distance between point C and point A

$\sqrt{3^2 + 4^2}$ = 5m

45. (b);



Clearly, point K is to the north-west to point H.

46. (c); Clearly, the distance between point K and point F is 3m.

Direction (47-50):

47. (a); Clearly, India has a patriarchal society, in a patriarchal social system males are in authority over females in all aspects of society.

48. (c); Modern girls are highly educated and they have demolished most of the traditional myths that girls are inferior to boys.

49. (c); There are many customs and traditions among the Hindus which weaken the position of women in India because India has a patriarchal society.

50. (e); Despite all legal efforts, the position of women in Indian society is very low and besides traditionally bestowed low position to women in India, khap panchayats and frequent *fatwas* issued by Ulemas add to the discomfiture of women.

Directions (51-55): (i)- By using the definite condition, C is husband of Q and both live on an odd numbered floor. P live on an even numbered floor but not below the floor on which Q live (thus there will be two possible case).

Case-1	
Floors	**Married couple**
5	
4	P/
3	
2	P/
1	C,Q
Case-2	
Floors	**Married couple**
5	
4	P/
3	C,Q
2	
1	

(ii) O live one of the floor above P, but not immediate above (therefore possibility of P being on 4th floor in case1 and case-2 will be eliminated). E doesn't live on an even numbered floor. E is neither the husband of N nor P (thus, E could be the husband of either M or O). O is neither the wife of A nor D (thus O could be the wife of either B or E). M is neither the wife of A nor D (thus M could be the wife of either B or E).
A live on a floor below E but not just below. B doesn't live on the uppermost floor. So it could live on Either 3rd or 2nd floor. So E lives on top in both the cases. So, only place left for B is 4th, but since it cannot live just above A. Therefore A is married to P. Husband of N lives just below M, So M is married to B.

(iii) So, in the final arrangement, the only couple left will be D is the husband of N.

Floors	Married couple
5	E,O
4	B,M
3	D,N
2	A,P
1	C,Q

51. (a); 52. (d); 53. (d);
54. (a); 55. (b);

Direction (56-57):

56. (b); Only II courses of action logically follow from the statement, as medical help is required at first place to the affected people.

57. (b); Both II and III looks appropriate, in first course of action, the school management should persuade the school teachers to assured them of considering the pay hike issue as the protest of teachers will affect the academic performance of students, and in next course of action, the school management should approach government guidelines.

Direction (58-60):

58. (a); The largest domestic airlines corporation has made the announcement that more number of flights in trunks routes are introduced because it assumes that more number of passengers may travel in trunk routes. So Assumption I is implicit. Assumption II is not implicit because no information is given about other routes.

59. (e); Both the assumptions are implicit because company officials may be able to make all the necessary preparations for the silver jubilee celebrations and majority of guest invited by the chairman may attend the function.

60. (b); By decreasing the price of a product, its sale can be increased. So, Assumption II is implicit. Assumption I is not correlated with the statement, so it is not implicit.

QUANTITATIVE APTITUDE

61. (d); let length & breadth rectangle be ℓ cm & 8 cm respectively.

ℓ - b = 24

$2(\ell + b) = 72$

$\ell + b = 36$

ℓ - b = 24

ℓ = 30 cm

b = 6 cm

$\frac{\ell b}{a^2} = \frac{5}{9}$

$\frac{30\times6}{a^2} = \frac{5}{9}$

$a^2 = \frac{180\times9}{5} = 324$

a= 18 cm

$\therefore$ volume of cone $= \frac{1}{3}\pi r^2 h$

$\frac{1}{3} \times \pi \times 18 \times 18 \times 6 = 648\pi \text{ cm}^3$

62. (c); ratio of profit

$12000 \times 12 : 14000 \times x : 8000(12 - x)$

$72 : 7x : (48 - 4x)$

Atq,

$\frac{48-4x}{120+3x} = \frac{1200}{10800}$

$\therefore$ x = 8 months

$\therefore$ Abhi works for(12 -8) = 4 months.

63. (a); Let the SP of both archit & Nik be Rs 100x

Profit of Nik = 20x

& profit of Archit $= \frac{50}{3}x$

$\therefore 20x - \frac{50}{3}x = 450$

$\therefore$ x = 135

$\therefore SP\ of\ each = 135 \times 100$

$= Rs\ 13500$

64. (e); Let speed of boat in still water be x km/hr and the speed of stream is y km/hr

$(0.4x - y) = \frac{160}{8} = 20$ km/hr

$0.6x + y = \frac{160}{4} = 40$ km/hr

$\therefore$ x = 60 km/hr

y = 4 km/hr

$\therefore$ speed of man $= \frac{60+4}{2} = 32$ km/hr

Required distance =(32 – 4) × 6

= 28 × 6 = 168 km

65. (a); Let initial amount of water be x litres

$\therefore$ initial amount of rum =(160 – x) litres.

ATQ,

$\frac{45}{100} \times x + \frac{25}{100} \times (160 - x) = \frac{3}{8} \times 160$

0.45x + 40 – 0.25x = 60

0.2x = 20

x = 100 litre

Required ratio = $\frac{100}{160-100} = 5 : 3$

66. (a); No. of students who paid fees through credit card in 2013 and 2014 together

$= 12{,}00{,}000 \times \left[\frac{16}{100} \times \frac{62.5}{100} + \frac{24}{100} \times \frac{75}{100}\right]$

= 120 × [1000 + 1800]

= 3,36,000

No. of students who paid fees through debit card in 2015 and 2016 together.

$= 12{,}00{,}000 \times \left[\frac{20}{100} \times \frac{62.5}{100} + \frac{15}{100} \times \frac{42.5}{100}\right]$

= 120× [1250 + 637.5]

= 2,26,500

Required difference = 3,36,000 – 2,26,500 = 1,09,500

67. (c); No. of students who paid through debit card in 2012

$= \frac{1}{2} \times 12{,}00{,}000 \times \left[\frac{15}{100} \times \frac{42.5}{100} + \frac{25}{100} \times \frac{20}{100}\right]$

= 60 × [637.5 + 500]

= 68250

$\therefore$ Total number of students in 2012 = 68250 × 3/2 = 1,02,375

68. (d); Required % $= \frac{12{,}00{,}000 \times \frac{25}{100} \times \frac{80}{100}}{12{,}00{,}000 \times \frac{20}{100} \times \frac{62.5}{100}} \times 100 = 160\%$

69. (b); Required Avg. $= \frac{1}{3} \times 12{,}00{,}000 \left[\frac{16}{100} \times \frac{37.5}{100} + \frac{24}{100} \times \frac{25}{100} + \frac{15}{100} \times \frac{42.5}{100}\right] = 73500$

70. (e); Required amount $= 12{,}00{,}000 \times \left[\frac{20}{100} \times \frac{37.5}{100} + \frac{25}{100} \times \frac{80}{100}\right] \times 20$

= 120 × 2750 × 20

= Rs. 66,00,000

71. (d);From I –

Let radius & height of cylinder be 7x & 4x respectively

ATQ –

$\frac{22}{7} \times (7x)2 \times 4x = 16632$

196x3 = 5292

x3 = 27

x = 3 cm

Radius of sphere = $\frac{7\times3}{2}$ = 10.5 cm

Volume of sphere = $\frac{4}{3} \times \frac{22}{7} \times (10.5)3$

= 4851 cm3

From II –

Let breadth of rectangle be 'b' cm

ATQ –

$\frac{2(24+b)}{24\times b} = \frac{23}{84}$

336 + 14b = 46b

32b = 336

b = 10.5 cm

Radius of sphere = 10.5 cm

Volume of sphere = $\frac{4}{3} \times \frac{22}{7} \times (10.5)3$

= 4851 cm3

So, either statement(I) or statement(II) by itself is sufficient to answer the question

72. (c); From I –

Total weight of all students =(48 + 28) × 45 = 3420 kg

From II –

Total weight of all girls = $3420 - (28 \times 35 + (48 - 28) \times 40) = 1640\ kg$

Average weight of girls = $\frac{1640}{28} = 58\frac{4}{7}\ kg$

So, Statement I & II together are required to given answer of the question.

73. (d); From I –

Let total distance between A to B is x km

ATQ –

$\frac{0.6x}{64} + \frac{0.4x}{48} = 8.5$

$\frac{5.4x+4.8x}{576} = 8.5$

10.2x = 4896

x = 480 km

From II –

Let total distance between A to B is y km

ATQ –

$\frac{(y-4)}{56} = 8.5$

y = 476 + 4

y = 480 km

So, either statement(I) or statement(II) by itself is sufficient to answer the question

74. (b);From I –

Probability of getting a black ball is = ⅙

Let there are 'a' black balls & '6a' total balls

Similarly red balls= 'a'

Probability of getting a while ball = ⅔ = 4/6

There will be 4a white balls.

x = 6a

But it can't be solved further.

From II –

Probability of getting a white balls = $1 - \frac{8}{23} = \frac{15}{23}$

Let here 15 m white balls and 23 m total remaining balls after 1 white ball is lost

And 23m + 1 = x

15m + 1 is initial number of white balls

15 m is multiple of 15, it could be

15, 30, 45....

But it is given that initial number is less than 27.

Therefore initial number of balls is 15m + 1 = 16 balls, and now 15 balls are remaining. Hence 23 m = x – 1

Put m=1

x=24 balls

Hence it can be answered from(ii) alone.

Solution (75-79)

Let total number of boys in school D = x

So total number of girls in school B = $2600 - x$

Girls in school A = $\frac{x}{7} \times 8 = \frac{8x}{7}$

Total students in school A = $\frac{112}{100} \times 2500 = 2800$

Girls in school C = $2600 - \frac{8x}{7}$

Boys in school A = $x - 200$

Sum of total students in school B and school D = 5800

Let girls in school D = y

So, boys in school B = $\frac{5}{3}y$

School	Total	Boys	Girls
A	2800	$x - 200$	$\frac{8x}{7}$
B		$\frac{5}{3}y$	$2600 - x$
C	2500		$2600 - \frac{8}{7}x$
D		x	y

So,

$x - 200 + \frac{8x}{7} = 2800$

$7x - 1400 + 8x = 2800 \times 7$

$15x = 21000$

$x = 1400$

Boys in school A = $x - 200 = 1200$

Girls in school A = $\frac{8}{7}x = \frac{8}{7} \times 1400 = 1600$

Girls in school B = 2600 – x = 2600 – 1400 = 1200

Girls in school C = $2600 - \frac{8}{7}x = 2600 - \frac{8}{7} \times 1400 = 1000$

Boys in school C = 2500 – 1000 = 1500

Boys in school D = 1400

Now

$\frac{5}{3}y + 2600 - x + x + y = 5800$

$\frac{8}{3}y + 1200 + 1400 = 5800$

$y = 1200$(Girls in school D)

Boys in school B = 2000

Schools	Total	Boys	Girls
A	2800	1200	1600
B	3200	2000	1200
C	2500	1500	1000
D	2600	1400	1200

75. (c); Required sum = 2000 + 1000 = 3000

76. (b); Required ratio = 32 : 26 = 16 : 13

77. (e); Required percentage = $\frac{1400-1000}{1400} \times 100$

$= \frac{4}{14} \times 100 = 28\frac{4}{7}\%$

78. (a); Required difference

$= \frac{(1200+2000+1500+1400)}{4} - \frac{(1600+1200+1000+1200)}{4}$

$= 1525 - 1250 = 275$

79. (d); Required probability = $\frac{1000}{5000} = \frac{1}{5}$

80. (b); $\sqrt{64 \times 36} + \frac{420}{6} - 540 = ? - 800$

$? = \sqrt{2304} + 70 - 540 + 800$

$? = 378$

81. (a); $\frac{16}{100} \times 1600 + \frac{?}{100} \times 1200 = 20 \times 122$

$256 + ? \times 12 = 2440$

$? = \frac{2184}{12} = 182$

82. (d); $(8)^3 + (15)^2 - (12)^2 = ? - 1220 - 1750$

$512 + 225 - 144 = ? - 2970$

$? = 3563$

83. (e); $20 \times \sqrt{?} = \frac{64}{100} \times 400 + \frac{12}{100} \times 1200$

$20 \times \sqrt{?} = 256 + 144$

$\sqrt{?} = \frac{400}{20} = 20$

$? = 400$

84. (c); $(?)^2 + \frac{14}{100} \times 1600 = 59 \times 12$

$(?)^2 + 224 = 708$

$(?)^2 = 484$

$? = 22$

85. (a); Let total student in college X be $15x$

$\therefore$ total girls in college X $= \frac{1}{3} \times 15x = 5x$

$\therefore$ Total boys in college X = $15x - 5x = 10x$

& boys in college Y = $\frac{10x}{2} \times 1 = 5x$

Total student in college Y $= 10x \times \frac{250}{100} = 25x$

Girls in college Y = $25x - 5x = 20x$

ATQ,

$20x - 10x = 420$

$\therefore$ Required difference = $25x - 15x = 10x = 420$

86. (d); Let total student in college K be $35x$

Total girls in K=7x

$\therefore$ total boys in K = $28x$

Total boys in L=7x

ATQ,

$28x + 7x = 1050$

$x = 30$

Required average = $\frac{1}{2}[7x + 7x] = 7x = 210$

87. (c); Let total students in college X be15x.

Then, boys in college X= 15x--$\frac{15x}{3}$= 10x

Boys in college X = 120

Total student in college X

$= \frac{120}{10x} \times 15x = 180$

Total student in college Z

$= \frac{180}{3} \times 4 = 240$

Boys in college Z = $180 \times \frac{1}{2} = 90$

Required ratio = $\frac{240-90}{120} = \frac{150}{120} = 5 : 4$

88. (b); Let girls in college L be x

$\therefore$ girls in college Z = $\frac{140}{100} \times x$

Atq,

x + 1.4x = 360

x = 150

$\therefore$ Girls in L = 150

& girls in Z = 210

Boys in L = $150 \times \frac{80}{100} = 120$

$\therefore$ Boys in college Z = 360 – 120=240

$\therefore$ required percentage

$= \frac{(240+210)-(150+120)}{150+120} \times 100$

$= \frac{450-270}{270} \times 100 = 66.67\%$

89. (b); Probability that no one can solve the given question

$= \frac{2}{3} \times \frac{3}{5} \times \frac{1}{2} = \frac{1}{5}$

Probability that the question will be solved = 1 – Probability that no one can solve the question

$= 1 - \frac{1}{5} = \frac{4}{5}$

90. (c); Let speed be S, distance be D & time be T

$S = \frac{D}{T}$

ATQ,

$S + X = \frac{D}{5}$ ...(i)

$S - X = \frac{D}{8}$ ...(ii)

On adding both the equations, we get

$2S = D\left[\frac{1}{5} + \frac{1}{8}\right]$

$2S = D\left[\frac{8+5}{40}\right]$

$T = \frac{D}{S} = \frac{80}{13} = 6\frac{2}{13}$ hours

ENGLISH LANGUAGE

71. (b); Refer to the third sentence of first paragraph. "Unemployment does not……labour market". Hence sentence (b) is true.

72. (c); Refer to the last sentence of the last paragraph. "This is the only area….. market problems"

Hence option (c) is true.

73. (b); Refer to the fourth sentence of first paragraph. "Increasing affluence……dimensions of hardships". Hence option (b) is true.

74. (e); Refer to the third sentence of second paragraph. "Low wages……self support". Hence option (e) is true.

75. (d); Refer to the last paragraph. "It is uncertain ……economic stimulus".

Hence option (d) is true.

76. (d); Option(d) is correct
In (a) the word 'inspiring' seems incorrectly to refer to the word 'barrier'; also the expression 'attempt overcoming' is unidiomatic.
In (d), the correct answer, 'inspired' is correctly parallel to 'broke', and 'attempt to overcome' is idiomatic.

77. (a); Option(a) is correct
The subject of the sentence is 'analysis' and therefore the verb should be the singular 'shows'. Hence either (d) or (a) must be correct.
The word 'even' should be in front of the word which it qualifies. The intention is to express surprise that some artisans owned silver, as indicated in (a) by putting 'even' in front of 'artisans', and not surprise at the spoons as implied in (d).
In (a), the correct answer, the word 'or' seems preferable because the artisan or yeoman might own any of the items and not necessarily all the items as would be implied by the use of 'and'.

78. (c); Option(c) is correct
The correct answer, (c), puts the items in the best order. Also note that the psychologist is making a general statement and so we need the present tense not the past that appears in (b), (d) and (a).

79. (d); Option(d) is correct
After the expression 'it is probable that' we should use a future tense and not a 'might', 'may' or 'should'.
Also note that 'around' cannot be used to mean 'approximately'.

80. (a); Option(**a**) is correct
In answer choices **(b)**, 'does' is incorrect and needs to be changed to 'is'. Among the remaining options we need to look for the one that best compares the function of gossip to the function of social grooming.
Once we look at it this way, the answer is clear – only **(a)** give a correct comparison.

81. (d); (i) Getting rid of colonial-era conventions may be necessary to make administration more efficient, but it is equally important to think through the reforms and work out a viable sequence.
(ii) To make administration more efficient, it may be necessary to get rid of colonial-era conventions, but it is equally important to think through the reforms and work out a viable sequence.

82. (d); (ii) Since a diversified diet that meets all nutritional requirements is difficult to provide, fortification of food is relied upon by many countries to prevent malnutrition.
(iii) As it is difficult to provide a diversified diet that meets all nutritional requirements, fortification of food is relied upon by many countries to prevent malnutrition.

83. (a); While there is definitely some merit in this criticism about the imposition of dietary uniformity across the country in our eateries and restaurants, the spirit behind the move is undoubtedly praiseworthy.

84. (c); Questioning a few not-so-righteous acts of judges and citing a few examples of corruption and nepotism may have a logical basis, but this cannot overwhelm the bold impartiality and character of a majority of our learned judges, reflected many times and in many situations.

85. (e); (i) Though there was an early speculation about Trump and Putin sharing a warm relationship, it is too early to see whether the recent attack will impact President Trump's declared position of reaching out to Russia.
(ii) Notwithstanding that there was an early speculation about Trump and Putin sharing a warm relationship, it is too early to see whether the recent attack will impact President Trump's declared position of reaching out to Russia.
(iii) Given an early speculation about Trump and Putin sharing a warm relationship, it is too early to see whether the recent attack will impact President Trump's declared position of reaching out to Russia.

86. (c); Option (c) is true.
Requisite means which is necessary or required.
superfluous means redundant, surplus

87. (a); Option (a) is true.
Replicate means make an exact copy of; reproduce.
Concurring means be of the same opinion; agree.

88. (d); Option (d) is true.
Refute means disapprove.
Abrogate means to evade.

89. (e); 'lesser, afford' fits the two blanks perfectly.
Meaning of some other words are:
Auxiliary means providing supplementary or additional help and support.
sustain means strengthen or support physically or mentally.

90. (c); 'Vital, responsibility' fits the two blanks perfectly.
Meaning of some other words are:
Indispensable means absolutely necessary.
lethargic means sluggish and apathetic.

For questions (91-95): The correct sequence is CABDE

91. (b); **92. (b);** **93. (b);**
94. (c); **95. (a);**

96. (e); All the given sentences are correct in context of the passage. "The Guardian drones, manufactured by General Atomics, will complement India's maritime surveillance aircraft at sea in intelligence, surveillance and reconnaissance", "UAVs have the potential to play a role in enabling the Indian military not only in fighting wars but also in intelligence, reconnaissance and surveillance, and deterring cross-border terrorist attacks.", "The additional capability will free up the navy's Boeing P-81s for anti-submarine warfare (ASW)." "The use of unmanned systems such as drones removes potential political costs".

97. (d); Sentences (b) and (c) are correct while sentence (a) is about Nishant drone. Other two are the features of The Israel Aerospace Industries' (IAI's) Heron TPs.

98. (e); Refer the sixth and seventh paragraphs of the passage, "Modern air defences……target them". It can be easily inferred that author talks about the existing concern towards the air securities of countries which are vulnerable to attacks. All three statements are related to the facts given in the passage indicating the expression what author means to say. Hence (e) is the correct choice.

99. (d); According to the passage, statements (II) and (III) are correct. Statement (I) does not go in agreement with the passage as it tells about UAV's role in economy which is irrelevant in context of it.

100. (d); The theme of the passage revolves around the import of armed drones by India from USA and Israel. Hence the title 'India's quest for Armed drones' is an appropriate title.

adda247

Mock 53

RBI Grade-B Phase I 2017

REASONING ABILITY

Directions (1-5): Each of the following questions below consists of a question and two statements numbered I and II given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and give answer.

(a) If data in statement I alone are sufficient to answer the question, while the data in statement II alone are not sufficient to answer the question.
(b) If data in statement II alone are sufficient to answer the question, while the data in statement I alone are not sufficient to answer the question.
(c) If the data either in statement I alone or in statement II alone are sufficient to answer the question.
(d) If the data even in both statements I and II together are not sufficient to answer the question.
(e) If the data in both statements I and II together are necessary to answer the question.

1. Which bag amongst P, Q, R, S and T is the heaviest?
I. Bag Q is heavier than R and S. Bag T is heavier than only bag P.
II. Only three bags are lighter than R. the weight of bag Q is 50 kg, which is 2 kg more than bag R.

2. Are all the five friends A, B, C, D and E who are seated around a circular table facing the centre?
I. A sits to the left of B. B faces the centre. D and E are immediate neighbours of each other. C sits second to the right of E.
II. D sits second to the right of C. C faces the centre. Both E and A are immediate neighbours of D. B sits second to the right of A.

3. In a college, five different subjects, viz. Physics, Chemistry, Botany, Zoology and Mathematics, are taught on five different days of the same week, starting from Monday and ending on Friday. Is Chemistry taught on Wednesday?
I. Two subjects are taught between Zoology and Mathematics. Mathematics is taught before Zoology. Chemistry is taught on the day immediately next to the day when Physics is taught. Botany is not taught on Friday.
II. Three lectures are scheduled between the lectures of Botany and Zoology. Mathematics is taught immediately before Physics.

4. Who earns the highest among the five friends ?
I. Priya earns more than Pinky and Sheetal and less than only Shilpa.
II. Sheetal earns more than Neetu but less than Pinky.

5. Is F granddaughter of B?
I. B is the father of M. M is the sister of T. T is the mother of F.
II. S is the son of F. V is the daughter of F. R is the brother of T.

Directions (6-10): Read the following information carefully and answer the given questions:

In Delhi NCR, There is a Jaypee University in which nine students i.e. E, G, H, I, J, K, L, M and N live in a hostel which having nine storey-building. They live on different floors. Floor number one lies on bottom, above on there is 2nd floor, and then 3rd floor, so on... They all have different branded Laptop which name is HP, Dell, Compaq, Sony, Acer, Lenovo, Toshiba, Asus and Apple.

There are five floors between L and the one who has Asus. I does not lives on top floor. The one which has HP lives immediate below the one which has Toshiba. The one which has Toshiba lives on even numbed floor. The one who has Compaq lives on Odd numbered floor but below from 6th floor. G lives on 6th floor and has Dell. The one who has Lenovo lives in top floor. The one who has Acer lives below from the one who has Compaq. The one who has Apple lives on 2nd floor. N lives above from M. E lives immediate below the one who has Lenovo. K lives immediate above floor from the one who has Asus. The one who lives on odd numbered floor, have Acer. There are 2 floors between I and G. The number of persons who live above J's floor, is same number of person who lives below from him/her (J). H lives on even numbered floor and has Sony.

6. Who among following has Acer?
(a) N (b) I (c) M
(d) G (e) J

7. How many members live between H and The one who has Dell?
(a) Five (b) Three (c) One
(d) Four (e) No one

8. Who lives on 2nd Bottom most floors?
(a) K (b) H (c) I
(d) J (e) M

9. Who among has Apple laptop?
(a) J (b) N (c) M
(d) K (e) None of these

10. The one who has Toshiba, lives on which floor?
(a) 5th (b) 7th (c) 1st
(d) 8th (e) 4th

Directions (11-15): Answer the questions on the basis of the information given below.
A number arrangement machine when given an input of words/numbers, rearranges them following a particular rule in each step. The following is an illustration of input and steps of rearrangement.
Input: 52 facility 67 68 Tattoo unique 83 outer 77 97 Kilogram elite
Step 1: elite 67 52 facility 68 Tattoo unique 83 outer 77 97 Kilogram
Step 2: elite 67 52 facility 68 unique 83 outer 97 Kilogram Tattoo 77
Step 3: elite 67 outer 83 52 facility 68 unique 97 Kilogram Tattoo 77
Step 4: elite 67 outer 83 52 facility unique 97 Kilogram 68 Tattoo 77
Step 5: elite 67 outer 83 unique 97 52 facility Kilogram 68 Tattoo 77
Step 6: elite 67 outer 83 unique 97 facility 52 Kilogram 68 Tattoo 77
This is the final arrangement and step 6 is the last step for this input.
Input: 37 8 goal sweet 86 67 illegal Abite 68 83 oliver narrow

11. How many elements are between 'illegal' and '83' in step 3?
(a) None (b) One (c) Two
(d) Three (e) More than three

12. Which element is third to left of sixth element from the right end in step 4?
(a) 68 (b) 67 (c) illegal
(d) goal (e) narrow

13. Which step number is following step?
Step: Abite 37 illegal 67 oliver 8 83 goal narrow 68 sweet 86
(a) 52 (b) 5 (c) 37
(d) 4 (e) There is no such step

14. In step 5, '37' is related to 'oliver' in the same way as in step 2, 'illegal' is related to 'oliver'. Now in step 4, 'goal' is related to what in the same way?
(a) oliver (b) 68 (c) narrow
(d) illegal (e) None of these

15. What is the multiplication of numbers, which are fourth from left end and third from the right end in step 6?
(a) 4556 (b) 5646 (c) 5698
(d) 2515 (e) None of these.

Directions (16-17): In each question below is given a statement followed by two courses of action numbered I and II. You have to assume everything in the statement to be true and on the basis of the information given in the statement, decide which of the suggested courses of action logically follow(s) for pursuing.
Give answer
(a) If only I follows (b) If only II follows
(c) If either I or II follows (d) If neither I nor II follows
(e) If both I and II follow.

16. Statement:
A large number of employees have gone on a mass casual leave in protest, against the company's new recruitment policy.
Courses of action:
I. The company should immediately withdraw the new recruitment policy.
II. All these employees should immediately be suspended from their service.

17. Statements:
A large cache of live ammunition has been found in the scarp-yard of a local steel factory.
Courses of action:
I. The steel factory should immediately be closed down till all these ammunitions are located and shifted to safe places.
II. The Government should immediately set up an enquiry to unearth the details and take corrective measures to avoid such incidence in future.

Directions (18-20): Below is given a passage followed by several possible inferences which can be drawn from the facts stated in the passage You have to examine each inference separately in the context of the passage and decide upon its degree of truth or falsity.
(a) If the inference is 'definitely true' i.e. it properly follows from the statement of facts given.
(b) If the inference is 'probably true' though not 'definitely true' in the light of the facts given.
(c) If the 'data is inadequate' i.e. from the facts given you cannot say whether the inference is likely to be true or false.
(d) If the inference is 'probably false' thought not 'definitely false' in the light of the facts given.
(e) If the inference is 'definitely false' i.e. it cannot possibly be drawn from the facts given or it contradicts the given facts.
Asia has become the growth centre of the world economy in recent years. Within the region, India and South Korea are the third and fourth largest economies after China and Japan. Though the Asian growth stories mainly revolve around India and China, South Korea has remained a key player for these countries as one of their major trading and investment partners. South Korea adopted outward–oriented economic policies with the beginning of its first five-year economic development plan in 1962 which

resulted in high growth and the integration of the Korean economy with the rest of the world. Subsequently high and consistent economic growth made South Korea one of the high-income economies in Asia. Korea is still growing at a faster rate compared to the other developed economies. India on the other hand, adopted an import substitution policy since its independence until the early 1990s. Since then India has introduced wide-driven ranging economic policy reforms and is moving towards market-driven economy. This has resulted in consistent high economic growth over the last one-and-a half decade.

18. Only Korean economy is considered as robust by the international community.

19. Japan's economic growth over the last decade is the highest in Asia.

20. The Korean economy is traditionally different than the India economy in its approach.

Directions (21-25): Study the following information carefully and answer the questions given below.
Seven members– J, Q, M, L, A, D and S. They lives in different places, namely Delhi, Ranchi, Chennai, Nagpur, Cuttack, Chandigarh and Mumbai, but not necessarily in the same order, and they are going for meeting on different days of the week, starting from Monday.

* J belongs to Ranchi, but going for meeting neither on Friday nor on Monday.
* L will going for meeting on Thursday and belongs to Nagpur.
* There is a gap of one day between J and L meeting.
* D going for meeting before S but after A and belongs to Cuttack going on Wednesday.
* S will going last day of the week.
* Q belongs to Mumbai.
* The person who belongs to Delhi is not going on Monday.
* The person belongs to Chandigarh will going on the last day of the week.
* The person who belongs to Chennai will going on Tuesday.
* The person who belongs to Mumbai is not going on Tuesday and Friday.

21. Q going for meeting on which day of the week?
(a) Friday (b) Tuesday (c) Saturday
(d) Wednesday (e) Monday

22. Which member will going for meeting between Thursday and Saturday?
(a) S (b) M (c) L
(d) A (e) J

23. Which of the following combinations is true?
(a) L – Thursday – Nagpur
(b) A – Wednesday - Delhi
(c) S – Saturday - Chandigarh
(d) M – Monday - Ranchi
(e) Q – Friday – Chennai

24. Which member belongs to Chennai?
(a) Q (b) L (c) A
(d) D (e) S

25. Which of the following combinations is true?
(a) Q-Tuesday (b) D-Sunday
(c) A-Thursday (d) Q-Monday
(e) None of these

Directions (26-28): Following questions are based on the information provided below.
'A × B' means 'A is mother of B'
'A – B' means 'A is brother of B'
'A + B' means 'A is sister of B'
'A ÷ B' means 'A is father of B'

26. Which of the following means 'R' is maternal uncle of 'T'?
(a) R – M × T (b) R + M × T (c) T × M – R
(d) T + M ÷ R (e) None of these

27. Which of the following means 'F' is paternal grandfather of 'H'?
(a) F – J ÷ H (b) F ÷ J – H (c) F ÷ J ÷ H
(d) H ÷ J ÷ F (e) None of these

28. How is K related to M in R ÷ M – K?
(a) Son (b) Daughter (c) Nephew
(d) Cannot be determined (e) None of these

Direction (29-33): In each of the questions below are given four statements followed by four conclusions numbered I, II, III and IV. You have to take the given statements to be true even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

29. Statements: Some red are blue.
Some blue are grey. All grey are white.
No white is black.
Conclusions:
I. No black is grey. II. Some blue are white.
III. Some black are red. IV. No black is red.
(a) Only I and II follow
(b) Only either III or IV follows
(c) Only I and either III or IV follow
(d) Only I, II and either III or IV follow
(e) None of thes

30. Statements: All red are white.
Some white are pink. Some pink are yellow.
No yellow is blue.
Conclusions:
I. No blue is pink. II. Some pink are red.
III. Some blue are red. IV. Some blue are pink.
(a) None follows
(b) Only either I or IV follows
(c) Only I follows
(d) Only III & IV follow
(e) All follow

31. Statements:
Some blue are black. Some black are grey.
All grey are red. All red are pink.
Conclusions:
I. Some red are black. II. Some pink are black.
III. Some pink are grey. IV. Some red are blue.
(a) Only I & II follow (b) Only II & III follow
(c) Only I, II and III follow (d) All follow
(e) None of these

32. Statements:
All green are pink. Some pink are black.
Some black are blue. All blue are white.
Conclusions:
I. Some black are white. II. Some blue are pink.
III. Some pink are green. IV. No green is white.
(a) None follows
(b) Only I and III follows
(c) Only III follows
(d) Only either I or II follows
(e) None of these

33. Statements:
Some blue are white. All white are red.
All red are pink. Some pink are yellow.
Conclusions:
I. Some yellow are red.
II. Some yellow are white.
III. All red are white.
IV. Some yellow are blue.
(a) None follows (b) Only I follows
(c) Only II follows (d) Only II & III follow
(e) None of these

Direction (34-38): Study the following information carefully to answer the given question.
Eight friends-L, M, P, R, S, T, V and W - are sitting around a circular table, but not necessarily in the same order. Four of them are facing inside and the other four are facing outside. All eight friends belong to eight different cities - Shillong, Indore, Banaras, Kanpur, Pathankot, Jaipur, Ranchi and Gaya but not necessarily in the same order. T faces the centre and sits third to the right of P. R belongs to Banaras and faces the person who belongs to Jaipur. V sits third to the right of M, who stays in Shillong. The person who belongs to Kanpur is facing the same direction as the person who belongs to Pathankot. S is sitting between the person who belongs to Banaras and the one from Gaya respectively. L belongs to Pathankot and P belongs to Indore. The person who belongs to Ranchi is facing outward and is immediate neighbour of the person who belongs to Gaya. W is the immediate neighbour of the persons who belong to Pathankot and Ranchi. S is on the immediate left of R.

34. Which of the following friends belongs to Jaipur?
(a) L (b) R (c) W
(d) V (e) S

35. Who are immediate neighbours of L?
(a) M and P (b) S and R (c) W and M
(d) V and S (e) R and T

36. Which of the following pairs is true?
(a) L - Shillong (b) W – Jaipur
(c) R - Kanpur (d) T - Kapur
(e) V – Indore

37. What is the position of M with respect to S?
(a) Third to the right (b) Fourth to the left
(c) Sixth to the right (d) Second to the right
(e) Third to the left

38. If R and W interchange their positions and similarly T and P interchange their positions, then what is the position of L with respect to P?
(a) Third to the left (b) Third to the right
(c) Second to the left (d) Immediate left
(e) None of these

Directions (39-43): In each of these questions, relationship between some elements is shown in the statement (s). These statements are followed by two conclusions. Read the statements and give answer :
(a) if only conclusion I follows.
(b) if only conclusion II follows.
(c) if either conclusion I or II follows.
(d) if neither conclusion I nor II follows.
(e) if both conclusions I and II follow.

39. Statement: $R = K < E \leq L = T \geq G \geq D$
Conclusions: I. $T > K$ II. $L \geq D$

40. Statement: $P \geq I \leq N < J < R > A$
Conclusions: I. $I \leq R$ II. $P > A$

41. Statement: $U < I$, $N > I$, $V = E$, $R \geq V$, $N < R$
Conclusions: I. $U > R$ II. $R \geq E$

42. Statement: $S \leq E$, $N \leq T$, $T > H$, $E \geq N$
Conclusions: I. $S > H$ II. $N \leq E$

43. Statement: $N > U \geq M = B < E \geq R \leq D$
Conclusions: I. $N > B$ II. $M \geq R$

Directions (44-45): Each of the following questions consists of a statement followed by two arguments I and II. Give answer
(a) if only argument I is strong
(b) if only argument II is strong
(c) if either I or II is strong
(d) if neither I nor II is strong
(e) if both I and II are strong.

44. Statement: Should all the infrastructural development projects in India be handed over to the private sector?
Arguments: I. No. The private sector entities are not equipped to handle such projects.
II. Yes. Such projects are handled by private sector in the developed countries.

45. Statement: Should colleges be given the status of a university in India?
Arguments: I. Yes. Colleges are in a better position to assess the students' performance and therefore the degrees will be more valid.
II. No. It is utopian to think that there will not be nepotism and corruption in awarding degrees by colleges.

Direction (46-50): Study the following information carefully and answer the questions given below.
World Cup is being organized by Brazil. Different teams are participating in the World Cup. Seven teams which are participating are – Argentina, Belgium, Colombia, Brazil, Chile, Germany and France. They will be playing there matches at different places, namely Rio de Janeiro, Brasilia, Sao Paulo, Cuiaba, Salvador, Curitiba and Manaus, but not necessarily in the same order, on different days of the week, starting from Monday.
Argentina will be playing at Brasilia, but neither on Friday nor on Monday.
The host country will be playing on Thursday at Cuiaba.
There is a gap of one day between Argentina and Brazil match.
Germany will be playing the match before France but after Chile at Salvador on Wednesday.
France will be playing on the last day of the week.
Belgium will be playing at Manaus.
No match will be played at Rio de Janerio on Monday.
The match at Curitiba will be played on the last day of the week.
The match at Sao Paulo will be played on Tuesday.
No match will be played at Manaus on Tuesday and Friday.

46. Belgium will be playing the match on which day of the week?
(a) Friday (b) Tuesday
(c) Saturday (d) Wednesday
(e) Monday

47. Which team will be playing the match between Thursday and Saturday?
(a) France (b) Colombia
(c) Brazil (d) Chile
(e) Argentina

48. Which of the following combination is true?
(a) Brazil – Thursday – Cuiaba
(b) Chile – Wednesday – Rio de Janeiro
(c) France – Saturday – Curitiba
(d) Colombia – Monday – Brasilia
(e) Belgium – Friday – Sao Paulo

49. Which team will be playing in Sao Paulo?
(a) Belgium (b) Brazil (c) Chile
(d) Germany (e) France

50. Which of the following combinations is true?
(a) Belgium -Tuesday (b) Germany -Sunday
(c) Chile -Thursday (d) Belgium -Monday
(e) None of these

Direction (51-52): In each question below is given a statement, followed by three courses of action numbered I, II and III. You have to assume everything in the statement to be true, and then decide which of the three given suggested courses of action logically follows for pursuing.

51. Statement: There have been quite a few incidents of highway robbery on the super expressway between cities A and B during recent months.
Courses of action:
I. The local administration should immediately set up police along the expressway to prevent robbery.
II. The local administration should immediately close down the expressway till the robbers are apprehended.
III. More and more people should be given training on how to tackle with the robbers.
(a) Only I follow (b) Only I and II follows
(c) Only I and III follow (d) All follow
(e) None of these

52. Statement: It has been reported by one of the TV channels that the answer papers of Board examination of one State are evaluated by students studying in the same standard with the help of model answer as instructed by the examiners.
Courses of action:
I. All such examiners should be immediately suspended from their official positions.
II. All such papers evaluated by the students should be immediately confiscated and got evaluated by qualified teachers.
III. The Board should explore possibilities ,even though they are remote, of getting the answer papers of this examination evaluated by computerized machines.
(a) Only I follow (b) Only II follows
(c) Only III follows (d) Only I and II follow
(e) All follow

Directions (53-57): Study the following information carefully and answer the given questions.
Twelve people are sitting in two parallel rows containing six people each, in such a way that there is an equal distance between adjacent persons. In row 1, E, F, G, H, I and K are seated and all of them are facing South, and in row 2, L, M, N, O, P and R are sitting and all of them are facing North. Therefore, in the given seating arrangement each member seated in a row faces another member of the other row. L sits third to right of O. Neither L nor O sits at extreme ends. I faces O. K does not face L and K does not sit at any of the extreme ends. K is not an immediate neighbor of I. M sits at one of the extreme ends. Only two people sit between M and P. P does not face K. Two persons sit between G and F. G is not an immediate neighbor of I. N does not face K. E is not an immediate neighbor of G.

53. Who amongst the following sit at extreme ends of the rows?
(a) M, P (b) H, I (c) E, G
(d) M, R (e) None of these

54. How many persons are seated between I and H?
(a) One (b) Two (c) Three
(d) Four (e) None

55. E is related to K in the same way as N is related to R. Which of the following is P related to, following the same pattern?
(a) M (b) O (c) N
(d) L (e) None of these

56. Which of the following is true regarding R?
(a) R sits second to right of N
(b) R is not an immediate neighbor of L
(c) R sits third to left of O
(d) R sits at one of the extreme ends of the line
(e) R faces K

57. Who amongst the following sits exactly between E and F?
(a) G (b) K (c) H
(d) I (e) Cannot be determined

58. In a class, Mahesh is 11th from the front and Sneha is 17th from end, if they interchange their position, Sneha becomes 11th from the front, how many Students are there in class?
(a) 28 (b) 26 (c) 39
(d) 41 (e) Can't be determined

59. From his house, Aman went 15 kms to the north. Then he turns west and covered 20 km. Then he turned south and covered 5 km. Finally turning to east, he covered 25 km. In which direction is he from his house?
(a) north west (b) north east
(c) south east (d) south west
(e) None of these

60. Divyaraj starts his journey from his home and he walks 10 km towards South direction. He takes a left turn and walks 8 km. After that he takes a right turn and walks 10 km. Now, he walks 14 km after taking a right turn. Finally he reached his office. In which directions, Divyaraj's office with respect to Divyaraj's home?
(a) South-West (b) North (c) West
(d) North-east (e) North-west

QUANTITATIVE APTITUDE

61. A and B together can do a piece of work in 16 days. B and C together can do the same work in 32 days. C can complete the same work in 80 days. After A has worked for 4 days, B for 12 days, time taken by C to complete the remaining job is x days.
P, Q and R take $(x - 28)$ days, $(x - 18)$ days and $(x - 8)$ days respectively to complete a job. The three work in a rotation to complete the job with only 1 person working on a day. Who should start the job so that the job is completed in the least possible time?
(a) P (b) Q (c) R
(d) Any one of the three
(e) Can't be determined

Directions (62-63): Abhishek bought some chairs and tables from a shopkeeper. The marked price of a chair and a table were in the ratio 5 : 8. The shopkeeper gave discounts of 20% and 25% on the chair & the table respectively. The ratio of number of chairs and tables bought by Abhishek is 6 : 5.

62. If Abhishek sells each chair and table bought by him at discounts of 25% and 20% respectively after marking up the prices of both by 50% and gives one table free for every four chairs bought by a customer and only $\frac{2}{3}rd$ of the total chairs are sold in bunch of four chairs, then what is the net profit /loss % made by Abhishek after selling all of the items which he bought from the shopkeeper?
(a) $6\frac{2}{3}\%$ (b) $3\frac{1}{3}\%$ (c) $2\frac{1}{2}\%$
(d) $4\frac{1}{4}\%$ (e) None of these

63. If the marked price of a table set by the shopkeeper was Rs.300 more than that of a chair and the total expenditure made by Abhishek in purchasing the chairs and table from the shopkeeper was Rs.108000, then how many chairs were purchased by Abhishek?
(a) 150 (b) 60 (c) 120
(d) 90 (e) None of these

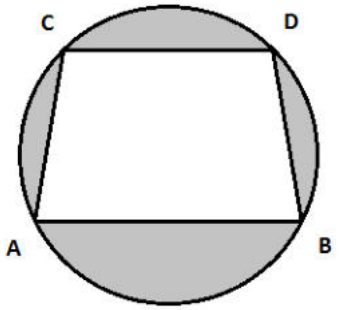
Directions (64-65): Two trains start together from a Station A in the same direction. The second train can cover 1.25 times the distance of first train in the same time. Half an hour later, a third train starts from same station and in the same direction. It overtakes the second train exactly 90 minutes after it overtakes the first train.

64. What is the speed of third train, if the speed of the first train is 40 Km/hr?
(a) 20 Km/hr (b) 50 Km/hr
(c) 60 Km/hr (d) 80 Km/hr
(e) none of these

65. What is the distance covered by third train till the time it overtakes the second train?
(a) 160 kms. (b) 150 kms. (c) 140 kms.
(d) 130 kms. (e) None of these

Directions (66-70): In the given questions, two quantities are given, one as Quantity I and another as Quantity II. You have to determine relationship between two quantities and choose the appropriate option.

66. Perpendicular distances of AB and CD from center of the circle are 6 cm and 8 cm respectively. AB || CD and AB – CD = 4 cm.



Quantity I: Area of the shaded region.
Quantity II: 125 cm^2.
(a) Quantity I > Quantity II
(b) Quantity I < Quantity II
(c) Quantity I ≥ Quantity II
(d) Quantity I ≤ Quantity II
(e) Quantity I = Quantity II or No relation

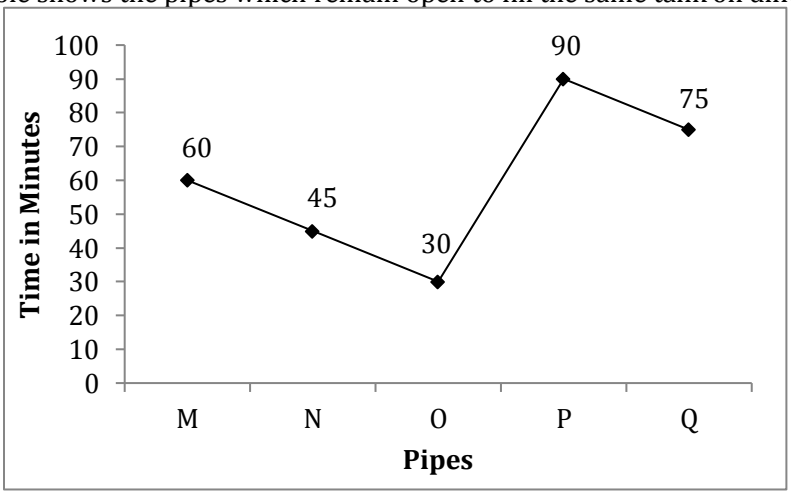
67. Train A with 40 km/h of speed started from point P for Q and another train B with 50 km/h of speed started simultaneously from point Q for P. They first met at point R. After reaching Q and P respectively, both the trains started their return journey without any delay. This time, they met at point S. The distance between point P and Q is 360 km.
Quantity I: The distance between point R and Q.
Quantity II: The distance between point P and S.
(a) Quantity I > Quantity II
(b) Quantity I < Quantity II
(c) Quantity I ≥ Quantity II
(d) Quantity I ≤ Quantity II
(e) Quantity I = Quantity II or No relation

68. There are three vessel A, B and C. Vessel A contains mixture of milk and water in ratio 3 : 1. Vessel B contains 20 litres of pure water while vessel C contains 30 litres of pure milk. Half of the content of vessel A is first poured into vessel B. Then content of vessel B is poured into vessel C and finally contents of vessel C is poured into vessel A. The final ratio of milk and water in vessel A is 9 : 4. Quantity I: Initial quantity of mixture in vessel A.
Quantity II: 80 litres.
(a) Quantity I > Quantity II
(b) Quantity I < Quantity II
(c) Quantity I ≥ Quantity II
(d) Quantity I ≤ Quantity II
(e) Quantity I = Quantity II or No relation

69. 20 men can complete a work in 12 days. 5 women are as efficient as 3 men. 4 men and 10 women started working and they already worked for 8 days.
Quantity I: Additional number of women required to complete the remaining work in 10 days.
Quantity II: Additional number of men required to complete the remaining work in either 8 or less than 8 days.
(a) Quantity I > Quantity II
(b) Quantity I < Quantity II
(c) Quantity I ≥ Quantity II
(d) Quantity I ≤ Quantity II
(e) Quantity I = Quantity II or No relation

70. The probabilities of three persons A, B and C telling the truth about an event are 0.6, 0.4 and 0.5 respectively.
Quantity I: Probability of not more than one person telling a lie.
Quantity II: Probability of at least two persons lying with B being one of them.
(a) Quantity I > Quantity II
(b) Quantity I < Quantity II
(c) Quantity I ≥ Quantity II
(d) Quantity I ≤ Quantity II
(e) Quantity I = Quantity II or No relation

Directions (71-75): Given below is the line graph which shows the time taken by five pipes M, N, O, P and Q to fill a tank individually in minutes. Table shows the pipes which remain open to fill the same tank on different days of week



Days	Pipe which remain on different days.
Mon	M, P
Tue	N, O, P
Wed	O, M
Thrus	N, O, P
Frid	M, Q

71. If on Monday pipe M works with a efficiency of 120 % and both pipe M and P on Monday remained open for 7 minutes but alternatively on each minute starting with M. Remaining part of the tank is filled on next day. What is the total time for which pipe P remained open on both days if next day all pipes filled the tank together?
(a) 12 min 15 sec (b) 16 min 18 sec
(c) 18 min 15 sec (d) 17 min 12 sec
(e) 20 min 10 sec

72. On Wednesday tank is filled by both pipes working simultaneously but on Thrusday all pipes work alternatively on each minute starting from pipe N then O and then P. Find the difference in time taken to fill the tank on Wednesday and the time taken be fill tank on Thursday.
(a) 5 min (b) 18 min (c) 15 min
(d) 20 min (e) 25 min

73. If on Friday 36 litre of water per minute is filled by both the pipes then, amount of water filled by pipe P on Monday is what percent of amount of water filled by pipe Q on Friday.
(a) 80% (b) 95% (c) 90%
(d) 80% (e) 75%

74. On Friday M worked with 120% of its efficiency and Q with 75% of its efficiency and they together can fill 162 litre of water in 12 min. On Monday if both the pipes (M and P) are working with a different efficiency then both pipes working together can fill $\frac{7}{30}$ part of the tank in 8 min and if M is opened for 8 min and P is opened for 15 min then they can fill 157.5 litre of water. Find the ratio of time taken by M alone and time taken by P alone to fill tank according to new efficiency on Monday.
(a) 2 : 3 (b) 4 : 3 (c) 3 : 4
(d) 5 : 3 (e) 3 : 5

75. If rate of flow of pipe N is 18 litre/min, and cost incurred in filling 1 litre of water in the tank by pipe N, O and P is 12 Rs./L, 15 Rs./L and 10 Rs./L respectively, then find the total cost incurred in filling the tank on Tuesday if all the pipes filled the tank simultaneously.
(a) 10,665 Rs. (b) 11,552 Rs.
(c) 12,666 Rs. (d) 9,848 Rs.
(e) 8,440 Rs.

76. The average age (in years) of a group of people is twice the number of people in the group. A person, X, leaves the group and the average age is still twice the number of people in the group. Now another person, Y, leaves the group and the average age is still twice the number of people in the group. If the ratio of the ages of X and Y is 19 : 17, then find the average age of the group, if one more person, Z, of age 16 years, leaves the group.
(a) 10 (b) 15 (c) 16
(d) 18 (e) None of these

Directions (77-78): Answer these questions based on the information given below.
6 men complete a piece of work in 12 days. 8 women can complete the same piece of work in 18 days. Whereas 18 children can complete the piece of work in 10 days. 4 men, 12 women and 20 children work together for 2 days, and then only 36 men were to complete the remaining work in x day.

77. A can do a piece of work in $10x$ days and B can do the same work in $20x$ days. They do the work on alternative days starting from A then in how many days A and B can complete the work?
(a) 11 days (b) 12 days (c) 13 days
(d) 14 days (e) None of these

78. $56x$ soldiers can complete a piece of work in 24 days. In how many days can 42 soldiers complete the same piece of work?
(a) 32 days (b) 24 days (c) 16 days
(d) 48 days (e) None of these

79. X started from a point A towards point B. After 2 hours. Y started from B towards A. By the time X travelled one-fifth of the total distance, Y had also travelled the same. If Y's speed is thrice that of X's speed, find the difference in the times (in hours) taken by X and Y to reach their destinations.
(a) 10 (b) 20 (c) 15
(d) 25 (e) none of these

80. A started a business, B and C joined him in the 1st year ,they invested in the ratio of 5:4:7 respectively and the period for which they invested was in the ratio of 4:3:2 respectively. In the 2nd year , A doubled the investment, B and C continued with the same investment as they investor for the same no. of month as they did in 1st year. The total profit after 2 years was 14000. What is B's share of profit.?
(a) Rs 2500 (b) Rs 3000 (c) Rs 3500
(d) Rs 4000 (e) none of these

Directions (81-85): Given below are two pie-chart. Ist pie chart shows the distribution of manufacturing of different models of Maruti car company in 2015. IInd pie chart shows the distribution of manufacturing of cars of different car manufacturing companies including Maruti in year 2016.
Note: Total cars manufactured by Maruti in 2015 and 2016 are equal.

Figure I

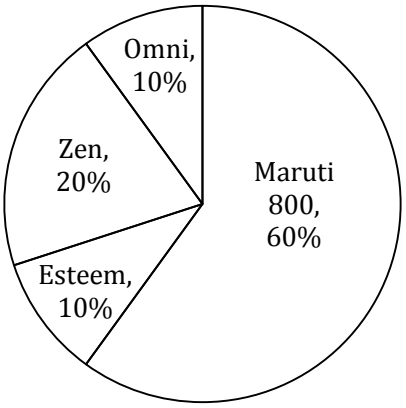
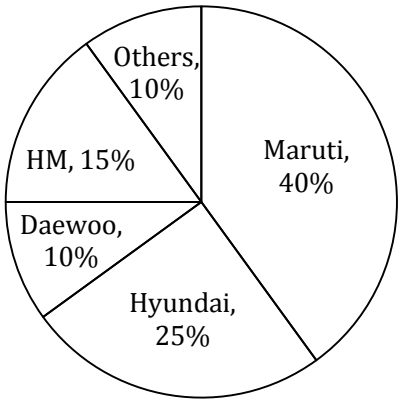


Figure II



81. If total cars manufactured by Daewoo in 2016 is 12.5% more than cars manufacture by Daewoo in 2015 than what is the ratio of cars manufactured by Daewoo in 2015 to the cars manufactured by Zen in 2015.
(a) 4 : 3 (b) 10:9 (c) 4 : 5
(d) 3 : 4 (e) 2 : 3

82. What is the ratio of total cars manufactured by Maruti of model Zen and Esteem together in 2015 to the total cars manufactured others in 2016.
(a) 3 : 4 (b) 4 : 3 (c) 5 : 3
(d) 6 : 5 (e) 5 : 6

83. If Esteem manufactured in 2015 is 15000 then what will be the average of cars manufactured in 2016 of company Hyundai and Daewoo.
(a) 60225 (b) 62625 (c) 65625
(d) 52225 (e) 54625

84. If total cars sold by Maruti in 2016 is $88\frac{8}{9}\%$ of the number of cars manufactured by it in 2016 then numbers of cars manufactured by model Zen of Maruti in 2015 is what percent of total cars sold by Maruti in 2016.
(a) 25% (b) 20% (c) 12.5%
(d) 27.5% (e) 22.5%

85. What is the ratio of number of cars sold by Hyundai in 2016 to number of cars sold by Maruti 800 in 2015 if Hyundai sold in 2016 is 80% of Hyundai manufactured in 2016 and Maruti 800 sold in 2015 is 90% Maruti 800 manufactured in 2015.
(a) 19 : 20 (b) 25 : 27 (c) 26 : 27
(d) 23 : 24 (e) 21 : 23

Directions (86-90): Given below is the data about students appeared in two exams i.e., A and B in six different years i.e., 2011 to 2016. Total students appeared in both exam in 2016 is 8000 while in 2013 it is 5800. Average number of students appeared in exam B in 2011 and 2013 is 3100 and is in the ratio 18 : 13. Students appeared in exam A in year 2015 is $33\frac{1}{3}\%$ more than students appeared in exam B in same year. Total students appeared in 2016 is 25% more than total students appeared in 2011. Students appeared in exam A in 2016 is $62\frac{26}{27}\%$ more than students appeared in exam B is 2015. Ratio of total students appeared in 2016 & 2014 is 16 : 13. Total number of students appeared in exam A in all six years is 21,100. Students appeared in exam B in 2011 is same as student appeared in exam A in 2015.Students appeared in exam A in 2012 is 700 more than that of students appeared in same exam in 2014. Students appeared in exam B in 2014 is 1200 less than that of in same exam in 2012.

86. In which year total students appeared in both exam is 3rd highest?
(a)2012 (b)2014 (c)2016
(d)2011 (e)Other than the given options

87. What is the respective ratio between students appeared in exam A in year 2011, 2012 and 2014 together to the students appeared in exam B in year 2013, 2014 and 2016 together?
(a) 95 : 97 (b) 99 : 97 (c) 98 : 97
(d) 99 : 95 (e) None of these

88. Find the difference between average number of students appeared in exam A and average of students appeared in exam B in starting four years?
(a)250 (b)225 (c)215
(d)200 (e)None of these

89. Students appeared in exam A in 2013 is how much less than students appeared in exam B in 2012?
(a)1400 (b) 1000 (c) 1100
(d) 1200 (e) 1300

90. Total number of students appeared in both exam in 2012 is what percent more than total number of students appeared in both exam in 2011?
(a) 25.25% (b) 28.25% (c) 31.25%
(d) 34.25% (e) 37.25%

ENGLISH LANGUAGE

Directions (91-95): Read the following passage carefully and answer the questions given below it. Certain words/phrases are given in bold to help you locate them while answering some of the questions.

IT is a truth that should now be universally acknowledged, that everywhere in the world our lives are driven by computers—or more specifically by the workings of information and communication technology (ICT) and, therefore, the Internet**. Our dependence on them is not just temporary or partial; it is continuous and overwhelming.** People who actively use computers—desktops, laptops, tablets or mobile telephones—are not the only ones whose lives are driven by them and by Internet access. Increasingly, certainly in urban areas, almost all forms of transport, most forms of financial transactions and many forms of quotidian work and interaction are reliant on the underlying operations of computer systems. As "the Internet of things" quietly becomes more and more significant, the very gadgets that people use on a regular basis function on the basis of information collected, computed and transmitted in ways that are typically not even known to or grasped by the user. All this has created new forms of dependency and vulnerability, which we do not fully recognize. The usual concerns that many people have about this domination of "smart" machines all around us relate to privacy, monitoring and surveillance, and, of course, the ever-present possibility of cyber fraud. These are certainly valid concerns. But the implications of a simple failure of a computer system—and outage or downtime—are somehow seen as less dire, probably because most people believe that such temporary collapses can be speedily rectified and dealt with, and that most computer systems have enough backup to resolve the ensuing problems quickly and relatively smoothly, without major disruption. However, now it seems that such a belief in the fundamental resilience (if such a word can be used) and reliability of systems based in cyberspace are not justified and could even be touchingly naive. The latest example of the fragility of these systems was the collapse of the computer system of British Airways on May 27, which led to a complete shutdown of flights for a full day followed by huge numbers of cancellations and delays and chaos and confusion for several days thereafter.

According to British Airways, the computer system broke down because of a "power failure"—**but surely that raises more questions than it answers**. How could an international airline as large and established as British Airways not have a system of uninterrupted power supply, which is something even private individuals seek to ensure when they are dealing with data? Surely it would have had multiple servers in different locations? What about adequate backup, including on the "cloud", which must be the most obvious item on any computer system checklist? And was there no system in place to deal with such emergency contingencies to minimise their adverse effects?

If none of this was apparently in place for British Airways, people would be justified in feeling concerned about many other computer systems that are assumed to have adequate protection, backup and contingency planning. What about banks, for example, and credit card companies that have apparently experienced various nightmarish hacks and other cyber threats that are intentionally played down by the media to prevent panic? What about military systems, which are increasingly reliant on software and computer programmes, which we do not lose sleep over because we assume that sufficient precautions have been taken to cover all possible contingencies, even unexpected ones?

91. How according to the author Information and Communication Technology has revolutionized the lives of people?

(I) People have become more dependent on electronic gadgets as they find them the most significant tool to access information related to any topic.

(II) There is an upsurge in the use of technology in urban areas as almost all forms of transport, most forms of financial transactions and many forms of quotidian work and interaction are reliant on the underlying operations of computer systems.

(III) There is an active utilization of the facilities being provided through various mediums like computer, tablet, internet and other electronic equipment transmitting immense relevant data for day-to-day use.

(a) Only (I) is correct
(b) Only (II) is correct
(c) Both (I) and (II) are correct
(d) Both (II) and (III) are correct
(e) All are correct

92. What does author mean by new forms of dependency and vulnerability related to the domination of IT products?

(I) There is a serious concern regarding the misuse of gadgets for some illegal activities.

(II) There is a rising concern related to privacy, monitoring and surveillance of smart products of IT.

(III) The possibility of cyber-fraud is one of the biggest concerns that has kept challenging the domination of IT products.

(a)Only (I) is correct (b)Only (II) is correct
(c)Only (III) is correct
(d)Both (II) and (III) are correct
(e)All are correct

93. Which of the following statements in context of the passage show(s) that the author is skeptical?
(a) Simple human errors have been responsible for sudden breakdowns of smart machines, so far with less adverse impact.
(b) There is a speedy rectification of cyber related problems as these products have the implications of quick self recovery.
(c) Any temporary collapse of computer system can be easily dealt with as they have enough backup to resolve the ensuing problems quickly and relatively smoothly, without major disruption.
(d) The reliability of systems based in cyberspace and its fundamental feature of flexibility are difficult to justify.
(e)Both (c) and (d)

94. What does author mean by the phrase "**but surely that raises more questions than it answers**"?
(I) The reason cited by the British Airways for the breakdown of computer system is difficult to digest as it raises further questions related to its security and privacy concerns.
(II) Being such a large and established airline, the reason of power failure shows the extent of casual approach of British Airways.
(III) The reason of power failure mask the errors of the concerned authority as it raises many questions related to back up plans.
(a)Only (I) is correct
(b)Both (I) and (III) are correct
(c)Both (I) and (II) are correct
(d)Both (II) and (III) are correct
(e)All are correct

95. What does author mean by the statement, "**Our dependence on them is not just temporary or partial; it is continuous and overwhelming**" as used in the passage?
(a) People have become more reliant on technology and its ever increasing popularity and utilization has made it the most reliable source of existence in coming future.
(b) The growing dependence on IT sector shows that with this rate it is going to surpass all other existing markets in near future.
(c) There is no partial dependency on Information and Technology as people have accepted their all products gleefully without making any future compromise.
(d) The over utilization of IT products shows that our dependency on these products is not temporary rather it has become a perpetual necessity.
(e) All are true.

Directions (96-100): Read the following passage carefully and answer the questions given below it. Certain words/phrases are given in bold to help you locate them while answering some of the questions.

Paragraph 1: Our brains are busier than ever before. We're assaulted with facts, pseudo facts, jibber-jabber, and rumour, all posing as information. Trying to figure out what you need to know and what you can ignore is exhausting. At the same time, we are all doing more. Thirty years ago, travel agents made our airline and rail reservations, salespeople helped us find what we were looking for in shops, and professional typists or secretaries helped busy people with their correspondence. Now we do most of those things ourselves. We are doing the jobs of 10 different people while still trying to keep up with our lives, our children and parents, our friends, our careers, our hobbies, and our favourite TV shows.

Paragraph 2: Our smartphones have become Swiss army knife–like appliances that include a dictionary, calculator, web browser, email, Game Boy, appointment calendar, voice recorder, guitar tuner, weather forecaster, GPS, texter, tweeter, Facebook updater, and flashlight. They're more powerful and do more things than the most advanced computer at IBM corporate headquarters 30 years ago. And we use them all the time, part of a 21st-century mania for cramming everything we do into every single spare moment of downtime. We text while we're walking across the street, catch up on email while standing in a queue – and while having lunch with friends, we surreptitiously check to see what our other friends are doing. At the kitchen counter, cosy and secure in our domicile, we write our shopping lists on smartphones while we are listening to that wonderfully informative podcast on urban beekeeping.

Paragraph 3: But there's a fly in the ointment. Although we think we're doing several things at once, multitasking, this is a powerful and diabolical illusion. Earl Miller, a neuroscientist at MIT and one of the world experts on divided attention, says that our brains are "not wired to multitask well… When people think they're multitasking, they're actually just switching from one task to another very rapidly. And every time they do, there's a cognitive cost in doing so." **So we're not actually keeping a lot of balls in the air like an expert juggler; we're more like a bad amateur plate spinner**, frantically switching from one task to another, ignoring the one that is not right in front of us but worried it will come crashing down any minute. Even though we think we're getting a lot done, ironically, multitasking makes us demonstrably less efficient.

Paragraph 4: Multitasking has been found to increase the production of the stress hormone cortisol as well as the fight-or-flight hormone adrenaline, which can overstimulate your brain and cause mental fog or scrambled thinking. Multitasking creates a dopamine-addiction feedback loop, effectively rewarding the brain for losing focus and for constantly searching for external stimulation.

To make matters worse, the prefrontal cortex has a novelty bias, meaning that its attention can be easily hijacked by something new – the proverbial shiny objects we use to entice infants, puppies, and kittens. We answer the phone, look up something on the internet, check our email, send an SMS, and each of these things tweaks the novelty- seeking, reward-seeking centres of the brain, causing a burst of endogenous opioids (no wonder it feels so good!), all to the detriment of our staying on task. It is the ultimate empty-caloried brain candy. Instead of reaping the big rewards that come from sustained, focused effort, we instead reap empty rewards from completing a thousand little sugar-coated tasks.

Paragraph 5: In the old days, if the phone rang and we were busy, we either didn't answer or we turned the ringer off. When all phones were wired to a wall, there was no expectation of being able to reach us at all times – one might have gone out for a walk or been between places – and so if someone couldn't reach you (or you didn't feel like being reached), it was considered normal. Now more people have mobile phones than have toilets. This has created an implicit expectation that you should be able to reach someone when it is convenient for you, regardless of whether it is convenient for them. This expectation is so ingrained that people in meetings routinely answer their mobile phones to say, "I'm sorry, I can't talk now, I'm in a meeting." Just a decade or two ago, those same people would have let a landline on their desk go unanswered during a meeting, so different were the expectations for reachability.

96. Why, according to the author, is the evolution of information technology fatigue in nature?

(I) The consistent progress in the field of information technology has inclined the interest of people towards the need of better and easier life.

(II) The dependency on various agents for the fulfillment of our daily needs and requirements has shifted drastically towards the urgency of technical development over the years.

(III) The multi-utility facility of information technology has broadened the scope of individual growth in the long run.

(IV) The redundant data in the form of eminent information that often constitute the misleading and inessential contents poses a serious challenge of perplexity.

(a)Both (I) and (II) are correct
(b)Both (II) and (III) are correct
(c)Only (IV) is correct
(d)Only (II), (III) and (IV) are correct
(e)All are correct

97. What is the tone of the author in paragraph 3?

(a)Incisive (b)Vindictive (c)Evasive
(d)Caustic (e)Assertive

98. What does author mean by, "**we're not actually keeping a lot of balls in the air like an expert juggler; we're more like a bad amateur plate spinner**"?

(I) Those who think that multitasking has allowed them to enhance their working capability are unaware of the fact that it has equally an opposite impact on their strength.

(II) Multitasking has helped us in saving most of our precious time and allowed us to share more time with our friends, families, hobbies, etc. though people consider it to be an easy escape route to our potential.

(III) While we think that performing multiple works at a time makes us smarter, powerful and more productive, we ignore the conventional truth related to it i.e. it affects our power of perception and understanding.

(a)Only (I) is true
(b)Only (III) is true
(c)Both (I) and (II) are true
(d)Both (II) and (III) are true
(e)All are true

99. Which of the following statements connects the Paragraph 4 with Paragraph 5?

(a) The uncertainty wreaks havoc with our rapid perceptual categorization system, causes stress, and leads to decision overload.

(b) All this activity gives us a sense that we're getting things done – and in some cases we are, but we are sacrificing efficiency and deep concentration when we interrupt our priority activities with email.

(c) It turns out that decision-making is also very hard on your neural resources and that little decisions appear to take up as much energy as big ones.

(d) Why would anyone want to add to their daily weight of information processing by trying to multitask?

(e) The irony here for those of us who are trying to focus amid competing activities is clear: the very brain region we need to rely on for staying on task is easily distracted.

100. How does multitasking create a dopamine-addiction feedback loop?

(I) It creates such a deep impact on our mind that it easily expropriates our curiosity towards something novel.

(II) It always prompts our mind to do something unique and creative constantly forcing it to search for external stimulation.

(III) It affects our thinking power and evades our concentration and thus slows down our brain efficiency.

(a)Only (I) is correct
(b)Only (II) is correct
(c)Both (I) and (II) are correct
(d)Both (II) and (III) are correct
(e)All are correct

Directions (101-102): In each of the following questions a short passage is given with one of the lines in the passage missing and represented by a blank. Select the best out of the five answer choices given, to make the passage complete and coherent (coherent means logically complete and sound).

101. The menacing spread, starting last Friday, of the malicious software WannaCry, which has since infected thousands of computer systems in 150 countries, is a frightening reminder of the vulnerabilities of a connected world. The cyber-attackers who unleashed it, as yet unknown, have essentially used chinks in Microsoft's outdated software to remotely gain access to computers of unsuspecting users so as to lock them out of their files. These attacks have been in the nature of what are called 'ransomware,' wherein attackers demand a ransom to decrypt the files they have force-encrypted. (_____)
(a) While the state of preparedness is a cause for worry, the likely origin of WannaCry forces stakeholders to revisit a long-standing and uneasy question regarding the actions of governments.
(b) Cyberthreats are only likely to grow, and the world needs to push for global rules on such issues.
(c) Cyber risk modelling firm Cyence estimates the economic damage to be $4 billion, a figure that may not seem daunting for a global-scale disruption such as this one.
(d) It is more than obvious now that cyber vulnerabilities have massive global implications.
(e) The U.S. assesses the balance between cybersecurity and national interest through what is called the Vulnerabilities Equities Process.

102. Centrist Emmanuel Macron has been projected to become next president of France after early estimates showed him beating far-right rival Marine Le Pen by around 65 per cent to 35 in the runoff election. _____. Reflecting on the early estimates, Macron said, "A new page in our long history has turned tonight." He added that he wanted the result to be that of rediscovery of hope and trust. The 39-year-old former investment banker will be the country's youngest-ever leader and faces a mounting challenge to revive the country's economy and fractured country.
(a) Macron said his victory in Sunday's election represented "hope" and a "new chapter" for France.
(b) The victory caps an extraordinary rise for the 39-year-old former investment banker, who will become the country's youngest-ever leader.
(c) The vote was considered as crucial for the fate of Europe following a high-octane divisive election campaign.
(d) Initial estimates showed Macron winning between 65.5% and 66.1% of ballots ahead of Le Pen on between 33.9% and 34.5%.
(e) The result will resonate worldwide and particularly in Brussels and Berlin where leaders will breathe a sigh of relief that Le Pen's anti-EU, anti-globalisation programme has been defeated.

Directions (103-104): Five statements are given below, labelled a, b, c, d and e. Among these, four statements are in logical order and form a coherent paragraph. From the given options, choose the option that does not fit into the theme of the paragraph.

103. (a) On account of the unique occupational dynamic, together with the constant pressure to address the growing public expectations of accountability, effectiveness and proactive service, police organizations need to be engaged in continual re-examination of their role.
(b) Police personnel of all ranks require proper training at the appropriate time in their careers.
(c) This cannot be achieved unless police leadership incorporates the latest concepts and practices in subjects as varied as criminology, sociology, cybersecurity, terrorism studies, criminal justice jurisprudence and organizational behaviour.
(d) Police officers play a central role in the law enforcement system.
(e) A well-organized academic paradigm to study the police and policing is what makes this possible.

104. (a) There will be more changes and they will be available through subsequent updates.
(b) The Windows Defender Exploit Guard will make it harder for hackers to exploit vulnerabilities in the OS.
(c) The Fall Creators Update introduces a new Fluent design which will give Windows 10 a more animated look.
(d) However, the changes that you are going to see now are subtle and only a small part of what is to come, according to Microsoft.
(e) Right now you get a new Acrylic Material design, which adds an opaque layered effect in apps to create an illusion of depth.

Directions (105): Sentences given in each question, when properly sequenced form a coherent paragraph. Each sentence is labeled with a letter. Choose the most logical order of sentences amongst the five choices given to construct a paragraph.

105. A. It dreams of this despite reports that almost three-fourths of the graduates emerging from these colleges and universities are adding little value to research and innovation as a result of the poor-quality education that they have received.
B. By repeatedly doing this, the Centre is limiting its role in improving the quality of education and research given that it controls only some hundred institutions in the country, which produce less than 1 per cent of the total number of graduates in the country every year.
C. Every year, India dreams of its higher educational institutions rising up to world standards in terms of ranking, number of peer-reviewed publications, and awards for research.
D. The Central government's solution to this problem is simple: increase the number of institutions under its control, whether it is the Indian Institutes of Technology or the medical institutes, and hope that the quality improves.
E. On the other hand, State universities produce over 95 per cent of the nation's graduates, including from the private college system through the affiliation route.
F. Yet they have little presence in bodies that frame policies and decisions regarding regulation or funding.
(a)CBDEFA (b)CDAEBF (c)CADBEF
(d)CABDFE (e)CEBDAF

Directions (106-110): In each of the following questions, there are two blanks with each blank indicating that something has been omitted. Choose the set of words for each blank which best fit into the meaning of the sentence.

106. The internet is a medium where users have nearly …….. choices and …….. constraints about where to go; and what to do.
(a) unbalanced, non-existent
(b) embarrassing, no
(c) unlimited, minimal
(d) choking, shocking
(e) maximum, minimum

107. Physicians may soon have…….. to help paralysed people move their limbs by bypassing the ……. nerves that once controlled their muscles.
(a) instruments, detrimental
(b) ways, damaged
(c) reason, involuntary
(d) impediments, complex
(e) methods, harmful

108. As a steadfast …….. of our right to liberty time, Mishra had few ……..
(a) defender, equals.
(b) opponent, enemies
(c) follower, enemies
(d) advocate, defenders
(e) leader, unequals

109. The newspaper accused the politician of …….. for making promises he knew he could not ……..
(a) revulsion, condone (b) liability, improve
(c) impunity, reprise (d) hypocrisy, fulfill
(e) forgery, overcome

110. The chief minister was ……..in his commitment to …….. the rise of crime and unemployment among his constituents.
(a) uncertain, staunch (b) headstrong, stem
(c) faltering, identity (d) firm, uphold
(e) sturdy, counter

Directions (111-115): In each of the following questions, five options are given and you have to choose the one which has some or any grammatical error in it.

111. (a) All his relatives expect his daughter to go on a month's vacation tour.
(b) Every animal in the zoo is fed regularly and attended on very promptly.
(c) The unskilled class of workers is the most exploited class under the present labour contract system.
(d) He was hard down for money and was being harassed by his creditor.
(e) No sooner did Minati reach the station than it started raining.

112. (a) He was willing to admit he was wrong, but he wasn't going to grovel.
(b) The debacle of the party admits no other explanation than its poor performance.
(c) You've wanted this all your life; admit it.
(d) Whether we want to admit it or not, we all wish everyone would like us.
(e) At least I admit I'm jealous - and I have every reason to be.

113. (a) Even now they waited for news that the eggs that had been taken from her body had been artificially fertilized.
(b) Without answering, he headed for the fireplace and opened the wood box.
(c) The voice and words belonged to Josh, and yet he had been dead for more than two years.
(d) When it slowed for the drive, the dust caught up, hiding it in a swirling cloud.
(e) The plan was to go for the cinema and then have dinner but Raj's late arrival upset the whole thing.

114. (a) Hardly did she went out of her house when the postman came with the telegram.
(b) There were only two soldiers but each soldier was equal to five policemen.
(c) He wanted certain boys to make entry into the Principal's chamber.
(d) But for your help, no boys would have succeeded in an All India competition like this.
(e) Once, we dwelt by the seaside but now we have settled ourselves in Mumbai.

115. (a) This photograph was comparatively good than that which he had kept in his purse.
(b) He has not only built this big theatre but he also built a few bungalows in this city.
(c) He felt happy to learn that his younger brother had got a prestigious job in his bank.
(d) Since they were not aware of the consequences, they might have asked you to transgress this social decorum.
(e) Having reached the station, you may buy your ticket and wait for the train for New Delhi.

Direction (116-118); Select the phrase/connector (**STARTERS**) from the given three options which can be used to form a single sentence from the two sentences given below, implying the same meaning as expressed in the statement sentences.

116. (1) The increasingly desperate need for foreign investment is forcing Havana's geriatric communists to loosen their iron grip.
(2) They have pervasive and ruthless state political control.
(i)Despite pervasive and…
(ii)In spite of desperate need…
(iii) Forcing Havana's geriatric …
(a)Only (i) is correct
(b)Only (iii) is correct
(c)Both (i) and (ii) are correct
(d)Both (ii) and (iii) are correct
(e)None is correct

117. (1) The continuing uncertainty in the agriculture sector is because of substantial dependence on rain-fed irrigation.
(2) Micro, small and medium enterprises (MSMEs) is an alternative power pack which is unutilized.
(i) Though micro, small and…
(ii)In context of the continuing…
(iii) While Micro, small and medium enterprises…..
(a)Only (i) is correct
(b)Only (ii) is correct
(c)Both (i) and (ii) are correct
(d)Both (ii) and (iii) are correct
(e)All are correct

118. (1) The Kremlin has implemented an offensive policy of multilateralism with the great rising powers to counter growing isolation from the West.
(2) It is in particular with China in the framework of the Shanghai Cooperation Organization (SCO).
(i)To counter growing isolation…
(ii)By implementing an offensive policy….
(iii)Although implementing an…
(a)Only (i) is correct
(b)Only (iii) is correct
(c)Both (i) and (ii) are correct
(d)Both (i) and (iii) are correct
(e)All are correct

Directions (119-120): In each of the questions given below a sentence is given with a blank which must be filled by one of the phrases which are provided in the options given below. Choose the phrase which fits the blank most appropriately and makes it grammatically and contextually correct.

119. Nature-based solutions hold great promise in areas which include sustainable food production, improved human settlements and _____ impact of climate change on water resources.
(a) helps to respond to the
(b) helping to respond to the
(c) helps to respond the
(d) help to respond to the
(e) helpful to respond the

120. Chennai in Tamil Nadu is a textbook example of how nature _____urban development-posed challenges.
(a) is ignoring the
(b) is being ignoring the
(c) ignore the
(d) is being ignored in
(e) has been ignored for

Solutions

REASONING ABILITY

1. (c); Data either in statement I alone or in statement II alone are sufficient to answer the question. Q **i**s the heaviest bag among all.

2. (b); Here in statement II it is known that A are **f**acing outside. So all friends are not facing the centre.

3. (c); From I it is known that chemistry is taught on Thursday. From II. It is known that chemistry **i**s taught on either Tuesday or Thursday.

4. (a); From 1st statement we can find that Shilpa earns highest.

5. (d); Neither of the statements are sufficient to say that F is grand –daughter of B.

Directions (6-10):

Floors	Students	Laptop
9	N	Lenovo
8	E	Toshiba
7	L	HP
6	G	Dell
5	J	Compaq
4	H	Sony
3	I	Acer
2	K	Apple
1	M	Asus

6. (b); **7. (c);** **8. (a);**

9. (d); **10. (d);**

Directions (11-15): Students let us understand the Logic behind this Question and lets understand how to solve it. As a first step let's first understand the logic behind the Output. If you will see the final output you will observe the following:

(*) Words starts with vowel in given input in ascending order: allow, outer, unique

(*) Words starting with Consonants in given input in ascending order: facility, Kilogram, Tattoo

(*) Prime numbers in ascending order: 67, 83, 97

(*) Composite Number in ascending order: 52, 68, 77

In step 1, vowel word and smallest prime number at start – elite 67

In step 2, consonant and largest composite number at last – Tattoo 77

In step 3, next vowel word and next prime number – outer 83 And so on

Input: 37 8 goal sweet 86 67 illegal Abite 68 83 oliver narrow

Step 1: Abite 37 8 goal sweet 86 67 illegal 68 83 oliver narrow

Step 2: Abite 37 8 goal 67 illegal 68 83 oliver narrow sweet 86

Step 3: Abite 37 illegal 67 8 goal 68 83 oliver narrow sweet 86

Step 4: Abite 37 illegal 67 8 goal 83 oliver narrow 68 sweet 86

Step 5: Abite 37 illegal 67 oliver 83 8 goal narrow 68 sweet 86

Step 6: Abite 37 illegal 67 oliver 83 goal 8 narrow 68 sweet 86

11. (e); **12. (b);** **13. (e);**

14. (c); **15. (a);**

16. (d); Here, the problem is one of mutual disagreement. So, extreme measures as getting rid of the policy or employees protesting against it, won't help. It can best be solved by finding a middle path via mutual talks. Thus, neither I nor II follows.

17. (e); Clearly, such a finding demands a probe into the matter along with sealing of the premises for further checks to avoid any mishap. Thus, both the course of action I and II follow.

18. (b); This statement can be 'probably true' because it is said that Korea is still growing at faster rate as compared to other developed economies.

19. (c); It is not mentioned is this paragraph about Japan's economic growth. So data is inadequate

20. (a); This statement is definitely true because Korean economy adopted a difference development plan

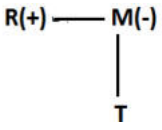
Directions (21-25):

Day	Team	Venue
Monday	Q	Mumbai
Tuesday	A	Chennai
Wednesday	D	Cuttack
Thursday	L	Nagpur
Friday	M	Delhi
Saturday	J	Ranchi
Sunday	S	Chandigarh

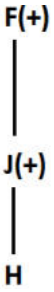
21. (e); **22. (b);** **23. (a);**

24. (c); **25. (d);**

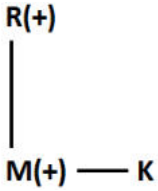
26. (a);



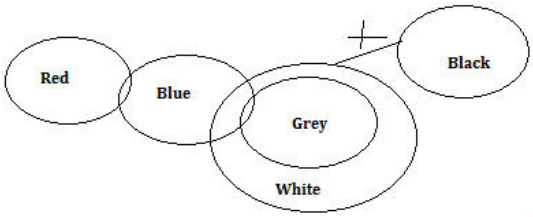
27. (c);



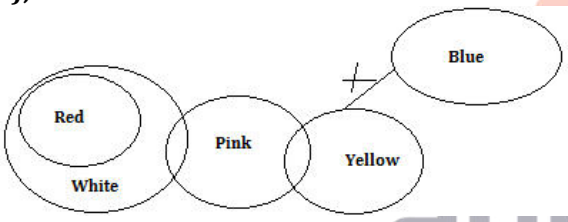
28. (d);



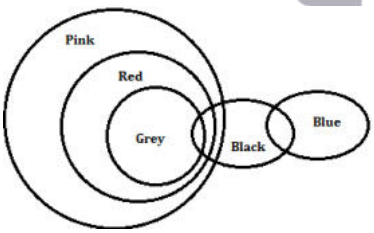
29. (d);



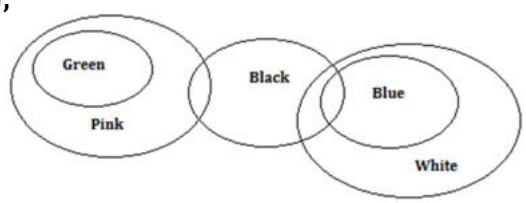
30. (b);



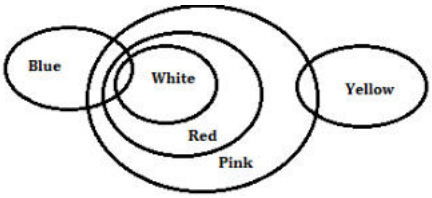
31. (c);



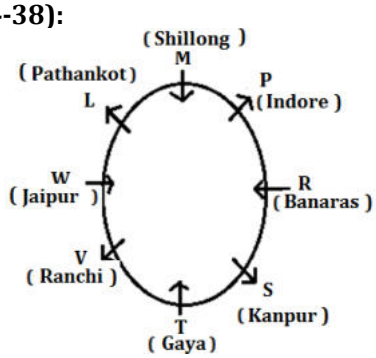
32. (b);



33. (a);



Direction (34-38):



34. (c); **35. (c);** **36. (b);**

37. (e); **38. (a);** **39. (e);**

40. (d); **41. (b);** **42. (b);**

43. (a);

44. (d); Clearly, such projects if handed over to the private sector shall be given to a competent authority. So, argument I is vague. Also, imitating a policy on the basis that it worked out successfully in other countries, holds no relevance. Thus, argument II also does not hold strong.

45. (d); Clearly, at the college level, all the students are assessed according to their performance in the University Exams and not on the basis of any criteria of a more intimate dealings with the students. So, argument I is vague. Also, at this level the awarding of degrees is impartial and simply based on his performance. So, argument II also does not hold.

Direction (46-50):

Team	Venue	Day
Argentina	Brasilia	Saturday
Brazil	Cuiaba	Thursday
Germany	Salvador	Wednesday
France	Curitiba	Sunday
Belgium	Manaus	Monday
Colombia	Rio de Janeiro	Friday
Chile	Sao Paulo	Tuesday

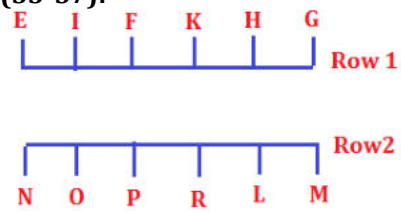
46. (e); **47. (b);** **48. (a);**

49. (c); **50. (d);**

51. (a); Clearly, incidents of robbery can be practically averted only by tightening security arrangements and increasing vigilance by police. So, I follows. Neither II nor III follows as none of them is practically viable.

52. (e); Students who work hard all the year round to perform well at the Board examination deserve to be evaluated correctly by experts, either mechanically or by experienced people. Besides, examiners who shirk their duty of evaluating answer papers, ought to be punished. So, all I, II and III follow.

Directions (53-57):

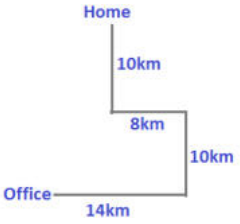


53. (c); **54. (b);** **55. (a);**

56. (e); **57. (d);** **58. (e);**

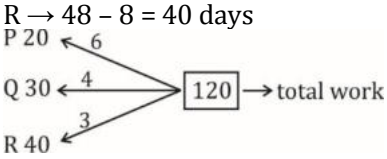
59. (b);

60. (a);



QUANTITATIVE APTITUDE

61. (a); P → 48 – 28 = 20 days
Q → 48 – 18 = 30 days
R → 48 – 8 = 40 days



If we want to do the work in least possible time then P should start the work because in 3 day they complete total 13 units of work and in 27 days they complete 117 units of work. Remaining 3 unit is completed by P in least time

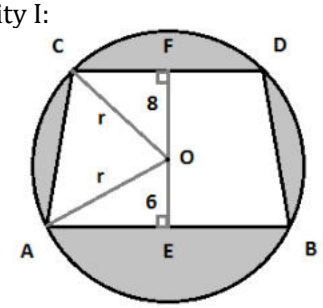
62. (b); Let the MP of a chair and a table be Rs.5x and Rs.8x respectively.
And, the number of chairs and tables bought be 6y and 5y respectively.
CP of a chair for Abhishek = (100 – 20)% of 5x
= Rs.4x
CP of a table for Abhishek = (100 – 25)% of 8x
= Rs.6x
Total CP for Abhishek = 4x × 6y + 6x × 5y = 24xy + 30xy = 54xy
SP of a chair for Abhishek = (100 – 25)% of (100 + 50)% of 4x = 4.5x
SP of a table for Abhishek = (100 – 20)% of (100 + 50)% of 6x = 7.2x
Number of chairs sold in bunch of four by Abhishek
$= \frac{2}{3}rd$ of 6y = 4y
So, number of table sold for free by Abhishek
$= \frac{1}{4}th$ of 4y = y
Total SP for Abhishek = 4.5x × 6y + 7.2x × (5y – y) = 27xy + 28.8xy = 55.8xy
Profit % $= \frac{55.8xy - 54xy}{54xy} \times 100 = \frac{1.8xy}{54xy} \times 100$
$= 3\frac{1}{3}\%$

63. (c); According to the question,
MP of a table = 300 + MP of a chair
⟹ 8x = 300 + 5x
⟹ x = 100
Total CP for Abhishek = 108000
⟹ 54xy = 108000
⟹ 54 × 100 × y = 108000
⟹ y = 20
Number of chairs purchased by Abhishek
= 6y = 120

64. (c); Ratio of distance covered by second train to that of first train = 1.25 : 1
= 5 : 4
Since time is same,
Ratio of their speeds is also 5 : 4
Speed of second train = $40 \times \frac{5}{4} = 50$ km/hr.
Distance covered by first train till half an hour = 20 km.
Let, third train takes 't' hrs. to overtake first train.
And speed of third train be x km/hr.
Then, $\frac{20}{x-40} = t$ .....(i)
Distance covered by second train till half an hour = 25 km.
$\frac{25}{x-50} = t + \frac{3}{2}$ .....(ii)
Solving (i) and (ii)
$x = 60$ km/hr, $t = 1$

65. (b); Distance covered by third train
$= 60 \times \left(1 + \frac{3}{2}\right)$ km
$= 60 \times \frac{5}{2}$
= 150 km.

66. (b); Quantity I:



Let O be the center and r be the radius of the circle.

Now,
Radius of the circle:
$r^2 = \frac{AB^2}{4} + 6^2$ ..... (i)
Also,
$r^2 = \frac{CD^2}{4} + 8^2$ ..... (ii)
From equations (i) and (ii)
$\frac{AB^2}{4} + 6^2 = \frac{CD^2}{4} + 8^2$
$\frac{AB^2 - CD^2}{4} = 8^2 - 6^2$
$\frac{(AB+CD)(AB-CD)}{4} = 28$
∵ AB – CD =4 cm .....(iii)
∴ AB + CD = 28 cm .....(iv)
From equations (iii) and (iv)
AB = 16 cm
From equation (i)
$r^2 = \frac{16^2}{4} + 6^2$
⟹ r = 10 cm
Radius of the circle = 10 cm
Sum of parallel sides of trapezium = AB + CD
= 28 cm
Height of trapezium = OE + OF = 6 + 8 = 14 cm
Area of shaded region = Area of circle – Area of trapezium ABCD
$= \pi \times 10^2 - \frac{1}{2} \times 28 \times 14$
= 100π - 196
≈ 118.16 cm^2
Quantity II > Quantity I

67. (b); Quantity I:
Time taken by the trains to meet for the first time
$= \frac{Total\ Distance}{Relative\ Speed}$
$= \frac{360}{40+50}$
= 4 hours
Distance between point R and Q
= Distance travelled by train B in 4 hours
= 50 × 4
= 200 km
Quantity II:
Time taken by the train A to reach Q
$= \frac{360}{40}$ = 9 hours
Time taken by the train B to reach P = $\frac{360}{50}$
= 7.2 hours
So, at the time when train A reached Q, train B already travelled for 1.8 hours (9 – 7.2 hours) of return journey.
Distance travelled by train B in 1.8 hours
= 1.8 × 50 = 90 km
Sum of distances travelled by both the trains to meet for the second time
= 360 – 90 = 270 km
Time taken by the trains to meet for the second time
$= \frac{Total\ Distance}{Relative\ Speed}$
$= \frac{270}{40+50}$
= 3 hours
Distance between point P and S
= Distance travelled by train B before train A started return journey + Distance travelled by train B in 3 hours
= 90 + 50 × 3
= 240 km
Quantity II > Quantity I

68. (e); Quantity I:
Let vessel A contains 3x litres milk and x litres water and initial quantity of mixture in vessel A be 4x litres.
Half of the content of vessel A is first poured into vessel B, then content of vessel B is poured into vessel C and finally contents of vessel C is poured into vessel A.
So, vessel A finally contains contents of all the three vessels.
Final ratio of milk and water in vessel A:
$\frac{Quanity\ of\ milk\ in\ all\ three\ vessels}{Quanity\ of\ water\ in\ all\ three\ vessels} = \frac{9}{4}$
$\frac{3x+30}{x+20} = \frac{9}{4}$
⟹ x = 20
Initial quantity of mixture in vessel A = 4x = 80 litres
Quantity I = Quantity II

69. (d); 20 men can complete the work in 12 days. So, 1 man can complete the same work in 240 days.
Efficiency of 5 women = Efficiency of 3 men
5W = 3M
Ratio of efficiencies:
$\frac{M}{W} = \frac{5}{3}$
Let, a man does 5 units and a woman does 3 units of work per day
& total units of work are 1200 units.
8 days' work of 4 men and 10 women
= 8 × (4 × 5 + 10 × 3) = 400 units
Remaining work = 1200 – 400 = 800 units
Quantity I:
Let the additional number of women required be x.
There are 4 men and 10 + x women now.
Per day work of 4 men and 10 + x woman
= 4 × 5 + (10 + x) × 3 = 50 + 3x units
$No.\ of\ day\ required\ to\ complete\ the\ remaining\ work$
$= \frac{800}{50+3x}$
$\frac{800}{50+3x} = 10$

x = 10
10 additional women are required to complete the remaining work in 10 days.
Quantity II:
Let the additional number of men required be y.
There are 4 + y men and 10 women now.
Per day work of 4 + y men and 10 woman
= (4 + y) × 5 + 10 × 3 = 50 + 5y units
$No.\ of\ day\ required\ to\ complete\ the\ remaining\ work = \frac{800}{50+5y}$
$\frac{800}{50+5y} \leq 8$
y ≥ 10
At least 10 additional men are required to complete the remaining work in either 8 or less than 8 days.
Quantity II ≥ Quantity I

70. (a); Quantity I:
Probability of not more than one person telling a lie
= Probability of all telling the truth + Probability of two persons telling the truth
$= P(A).P(B).P(C) + P(A).P(B).\overline{P(C)} + P(A).\overline{P(B)}.P(C) + \overline{P(A)}.P(B).P(C)$
= 0.6 × 0.4 × 0.5 + 0.6 × 0.4 × 0.5 + 0.6 × 0.6 × 0.5 + 0.4 × 0.4 × 0.5
= 0.12 + 0.12 + 0.18 + 0.08
= 0.5
Quantity II:
Probability of at least two persons lying with B being one of them
= Probability of all lying + Probability of two persons lying with B being one of them
$= \overline{P(A)}.\overline{P(B)}.\overline{P(C)} + P(A).\overline{P(B)}.\overline{P(C)} + \overline{P(A)}.\overline{P(B)}.P(C)$
= 0.4 × 0.6 × 0.5 + 0.6 × 0.6 × 0.5 + 0.4 × 0.6 × 0.5
= 0.12 + 0.18 + 0.12 = 0.42
Quantity I > Quantity II

71. (b); With 120% efficiency pipe M alone will fill the tank in
$= \frac{60}{6} \times 5 = 50\ min.$
Part of tank filled in 7 minutes working alternatively
$= \frac{4}{50} + \frac{3}{90}$
$= \frac{4}{50} + \frac{1}{30} = \frac{12+5}{150} = \frac{17}{150}$
Part of tank filled in 1 min on Tuesday
$= \frac{1}{45} + \frac{1}{30} + \frac{1}{90}$
$= \frac{2+3+1}{90}$
$= \frac{1}{15}$
So, remaining part of tank will be filled in
$= 15 \times \left(1 - \frac{17}{150}\right)$
$= 15 \times \frac{133}{150}$
$= \frac{133}{10} min$
= 13 min 18 sec
Required time = (3 + 13) min 18 sec
= 16 min 18 sec

72. (e); Time taken be fill tank on Wednesday
$= \frac{30\times60}{90}$
$= 20\ min$
Part of tank filled in 3 min on Thrusday
$= \frac{1}{45} + \frac{1}{30} + \frac{1}{90}$
$= \frac{2+3+1}{90}$
$= \frac{1}{15} min$
Total time to fill tank on Wednesday
= 15 × 3 = 45 min.
Required difference = 45 – 20 = 25 min.

73. (c); Total time taken on Friday to fill the tank
$= \frac{60\times75}{135}$
$= \frac{100}{3} min.$
$Total\ capacity\ of\ tank = \frac{100}{3} \times 36 = 1200\ litre$
Ratio of efficiency of pipe M and Q = 5 : 4
Amount of water filled on Friday by Q
$= \frac{4}{9} \times 1200 = \frac{4800}{9} Litre$
Ratio of efficiency of pipe M to P = 3 : 2
Amount of water filled on Monday by pipe P
$= \frac{2}{5} \times 1200 = 480\ litre$
Required percentage $= \frac{480}{\frac{4800}{9}} \times 100$
$= 90\%$

74. (b); Time taken to fill the tank by M alone with increased efficiency = 50 min.
Time taken to fill the tank by Q alone with decreased efficiency = 100 min.
Now, Together they can fill the tank in
$= \frac{100\times50}{150}$
$= \frac{100}{3} min.$
$Capacity\ of\ tank = \frac{162}{12} \times \frac{100}{3} = 450\ litre$
Let M and P can fill tank alone with different efficiency in x min and y min respectively
$So,\ \frac{8}{x} + \frac{8}{y} = \frac{7}{30} \quad \ldots(i)$
$and \quad \frac{8}{x} + \frac{15}{y} = \frac{7}{20} \quad \ldots(ii)$
Solving (i) and (ii)
$\frac{7}{y} = \frac{7}{20} - \frac{7}{30}$
$\frac{7}{y} = \frac{21-14}{60}$
$y = 60\ min$
So, x = 80 min.

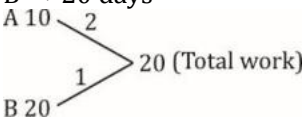
Required ratio = 4 : 3

75. (a); Rate of flow of pipe N = 18 ℓ/min.
Capacity of tank = 18 × 45 = 810 litre
Rate of flow of pipe O
$= \frac{810}{30} = 27\ \ell/min.$
Rate of flow of pipe P
$= \frac{810}{90} = 9\ \ell/min.$
Part of tank filled in one min
$= \frac{1}{45} + \frac{1}{30} + \frac{1}{90} = \frac{1}{15}$
Time taken to fill tank by all = 15 min
Total cost incurred in filling tank
= 15×18×12 + 15×27×15 + 15×9×10
= 15 (216 + 405 + 90)
= 10665 Rs.

76. (c); Let, initial no. of people in the group be 'n'.
Let $19x\ and\ 17x$ be ages of X and Y respectively,
A.T.Q.,
$2n^2 - 19x = 2(n-1)^2$ .....(i)
And $2n^2 - 19x - 17x = 2(n-2)^2$
$2n^2 - 36x = 2(n-2)^2$ .....(ii)
Solving (i) and (ii),
$x = 2, n = 10$
Average age of group after Z leaves the group $= \frac{2\times10^2 - 19\times2 - 17\times2 - 16}{10-3}$
$= \frac{112}{7}$
= 16

Solutions (77-78): Man → 12 × 6 days
Woman → 8 × 18 days
Child → 10 × 18 days
(4 men + 12 women + 20 children)'s 2 day work
$= 2\left[\frac{4}{12\times6} + \frac{12}{8\times18} + \frac{20}{10\times18}\right] \Rightarrow = \frac{1}{2}$
$Remaining\ work = 1 - \frac{1}{2} = \frac{1}{2}$
According to question $\frac{\frac{1}{2}}{\frac{36}{12\times6}} = x$
$x = 1$

77. (c); A → 10 days
B → 20 days



2 days' work of (A + B) = 3
12 days' work of (A + B) = 18
A does the remaining work (20 – 18 = 2 units)
$Required\ time = 12 + \frac{2}{2} = 13\ days.$

78. (a); Soldier = 56 × 1 × 24 days
$Required\ time = \frac{56\times24}{42} = 32\ days$

79. (a); Let the speed of X be x kmph. Distance travelled by X in 2 hours = 2x km.
Suppose X takes t hours to travel $\frac{1^{th}}{5}$ of the distance AB.
Y would take (t–2) hours to travel $\frac{1^{th}}{5}$ of the distance AB.
As Y's speed is thrice that of X's speed.
$\frac{t-2}{t} = \frac{1}{3}$
t = 3
$\frac{1^{th}}{5}$ of the distance AB = 3x km.
AB =15x km
Time taken by X to cover 15x km = $\frac{15x}{x} = 15$ hours
Time taken by Y to cover 15x km
$= \frac{15x}{3x} = 5\ hours.$
∴ Difference in the times = 10 hours.

80. (b); Let there investment in Ist year = $5x, 4x, 7x$
Time = 1 year, $\frac{3}{4}$ year, $\frac{1}{2}$ year
Investment in second year = $10x, 4x, 7x$
Time = 1 year, $\frac{3}{4}$ year, $\frac{1}{2}$ year
Ratio of profit = 15 : 6 : 7
Share of B = $\frac{6}{28} \times 14000 = 3000$ Rs.

81. (b); Let total cars manufactured by Daewo in 2015 = $200x$
So, Let total cars manufactured by Daewo in 2016 = $225x$
Cars manufactured by Zen in 2015
$= \frac{20}{100} \times \frac{225x}{10} \times 40$
$= \frac{225x}{5} \times 4$
$= 45 \times 4 \times x$
$= 180x$
Required ratio = 200 : 180
= 10 : 9

82. (d); Let total cars manufactured in 2016 = $100x$
Cars manufactured by Maruti in 2016 = $40x$
Cars manufactured by Zen and Esteem in 2015
$= \frac{30}{100} \times 40x \Rightarrow = 12x$
Required ratio = 12 : 10
= 6 : 5

83. (c); Model Esteem of Maruti manufactured in 2015 = 15000
Total Maruti cars manufactured in 2015
$= \frac{15000}{10} \times 100$
= 1,50,000
Average of cars of Hyundai and Daewoo manufactured in 2016
$= \frac{1}{2}(25 + 10) \times \frac{150000}{40}$
$= 65625$

84. (e); Let total cars manufactured of Maruti in 2016 = $900x$
So, cars sold of Maruti in 2016 = $800x$
Cars of model Zen manufactured by Maruti in 2015
$= 900x \times \frac{20}{100}$
$= 180x$
$Required\ percentage = \frac{180}{800} \times 100 = 22.5\%$

85. (b); Let Hyundai cars manufactured in 2016
= $500x$
So, Hyundai cars sold in 2016 = $400x$
and
Maruti 800 manufactured in 2015
$= \frac{500x}{25} \times 40 \times \frac{60}{100}$
$= 480x$
Maruti 800 sold in 2015
$= \frac{90}{100} \times 480x$
$= 432x$
Required ratio = 400 : 432
= 25 : 27

Direction (86-90);
Total students appeared in 2016 = 8000
Total students appeared in 2013 = 5800
Total students appeared in exam B is 2011 & 2013 = 6200
Total students appeared in exam B in 2011 $= \frac{6200}{31} \times 18 = 3600$
Total students appeared in exam B in 2013 $= \frac{6200}{31} \times 13 = 2600$
Total students appeared in exam A in 2013 = 5800 – 2600 = 3200
Total students appeared 2011 $= \frac{8000}{125} \times 100 = 6400$
Total students appeared in exam A in 2011 = 6400 – 3600 = 2800
Total students appeared in 2014 $= \frac{8000}{16} \times 13 = 6500$
Students appeared in exam B in 2011 = Students appeared in exam A in 2015 = 3600
Students appeared in exam B in 2015 $= \frac{3600}{4} \times 3 = 2700$
Students appear in exam A in 2016 $= \left[1 + \frac{1700}{2700}\right] \times 2700 = 4400$
Students appear in exam B in 2016 = 8000 – 4400 = 3600
Let, student appeared in exam A in 2014 = x
student appeared in exam A in 2012 = x + 700
⇒ x + x + 700 + 2800 + 3200 + 3600 + 4400 = 21,100
2x = 6400
x = 3200
Students appeared in exam A in 2014 = 3200
Students appeared in exam A in 2012 = 3200 + 700 = 3900
Students appeared in exam B in 2014 = 6500 – 3200 = 3300
Students appeared in exam B in 2012 = 3300 + 1200 = 4500

	A	B	Total
2011	2800	3600	6400
2012	3900	4500	8400
2013	3200	2600	5800
2014	3200	3300	6500
2015	3600	2700	6300
2016	4400	3600	8000
Total	21,100	20,300	

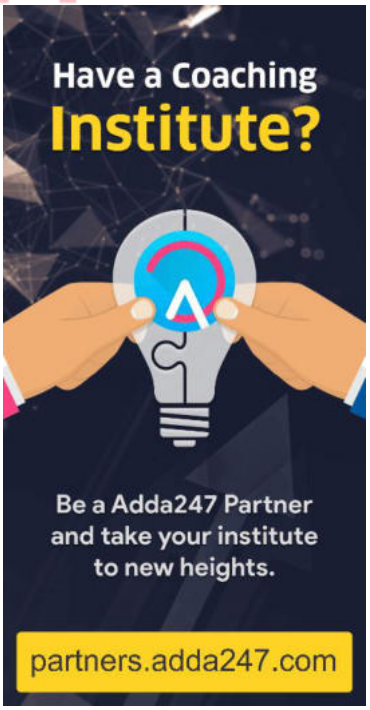
86. (b); According to table its in 2014.

87. (d); $Required\ ratio = \frac{2800+3200+3900}{2600+3300+3600}$
$= \frac{9900}{9500} = \frac{99}{95}$

88. (b); Average students appeared in exam A in starting four years
$= \frac{2800+3900+3200+3200}{4} = 3275$
Average students appeared in exam B in starting four years
$= \frac{3600+4500+2600+3300}{4}$
$= 3500$
Required difference = 225.

89. (e); Required difference = 4500 – 3200 = 1300

90. (c); $Required\ \% = \frac{8400-6400}{6400} \times 100$
$= \frac{2000}{6400} \times 100$
$= 31.25\%$



ENGLISH LANGUAGE

91. (e); Read the first paragraph carefully, it can be easily inferred from there that in today's world, Information and Communication Technology has completely changed the lives of people around the world. All three statements can be easily verified from the first paragraph. Hence (e) is the correct choice.

92. (d); Refer the second paragraph, "The usual concerns that many people have about this domination of "smart" machines all around us relate to privacy, monitoring and surveillance, and, of course, the ever-present possibility of cyber fraud." Hence both the statements (II) and (III) are correct in context of the passage.

93. (e); Refer the last sentence of the second paragraph, "…most people believe that such temporary collapses can be speedily rectified and dealt with, and that most computer systems have enough backup to resolve the ensuing problems quickly and relatively smoothly, without major disruption." and the first sentence of the third paragraph, "…now it seems that such a belief in the fundamental resilience (if such a word can be used) and reliability of systems based in cyberspace are not justified and could even be touchingly naive." These two statements have nicely been justified with the example of power failure of British Airways. Hence both these statements show that the author is skeptical about the reliability and truth related to such issues.

94. (b); Read the fourth paragraph carefully, it is clearly mentioned there that the reason of power failure for the breakdown of computer system raises more questions related to its existing back up plans, security, privacy and problem solving measures. Hence in context of the passage, both the statements (I) and (III) are correct.

95. (a); Refer the first paragraph of the passage carefully, "IT is a truth that should now be universally acknowledged, that everywhere in the world our lives are driven by computers—or more specifically by the workings of information and communication technology (ICT) and, therefore, the Internet. Our dependence on them is not just temporary or partial; it is continuous and overwhelming." Hence it can be inferred from the passage that only option (a) defines the hidden meaning behind statement used by the author in a better way.

96. (c); Read the first paragraph carefully, "We're assaulted with facts, pseudo facts, jibber-jabber, and rumour, all posing as information. Trying to figure out what you need to know and what you can ignore is exhausting." Hence the author feels that excess information leads to more confusion and conflict of trust which shows that the modification of information technology is fatigue in nature.

97. (d); Read the third paragraph carefully, the author finds a contrasting reality to what people perceive to be efficient to them. He clearly mentions in the paragraph that multitasking is a powerful and diabolical illusion. Hence the tone of the author in this particular paragraph is ironical or caustic.

98. (b); Refer the third paragraph, "When people think they're multitasking, they're actually just switching from one task to another very rapidly. And every time they do, there's a cognitive cost in doing so…" Hence the author tries to explain the negative impacts of multitasking with the given example.

99. (e); Read both the paragraphs carefully, the author clarifies his stand on demerits related to multitasking by giving various practical examples. Hence the statement (e) connects the paragraph 4 with paragraph 5 as it points out the ironical figure that people perceive to be true considering the ample activities.

100. (e); Read the paragraph 4, "Multitasking creates a dopamine-addiction feedback loop, effectively rewarding the brain for losing focus and for constantly searching for external stimulation. To make matters worse, the prefrontal cortex has a novelty bias, meaning that its attention can be easily hijacked by something new – the proverbial shiny objects we use to entice infants, puppies, and kittens." Hence all the given statements are correct in context of the paragraph.

101. (c); The paragraph here talks about the issue of malicious software gaining access to the computers of unsuspecting users. Going through the sentences, we find that sentence (c) goes in harmony with the paragraph as it talks about the damage due to this threat whereas other sentences talks about the US assessing the balance, the global implications of cyber vulnerabilities, state preparedness which are irrelevant to the paragraph. Hence sentence (c) is the right option.

102. (c); The given paragraph is about the new president of France and his victory in the presidential election. Read the sentences on either side of the blank space, it can be inferred from there that only option (c) forms a valid substitution. Other options fail to fill the gap as they do not add meaning to the theme of the paragraph. Hence (c) is the correct option.

103. (d); The correct sequence of the possible coherent paragraph formed from the given sentences is **bace** as the author is talking about the need to give proper training to police personnel so that they can solve problems with various modern techniques. Among the given options, only option (d) has no connection with any of the other sentences of the paragraph as it is talking about the importance of police officers in law enforcement systems. The important thing here to remember is that sometimes all the sentences can make sense but it is how they connect to form a paragraph is what that matters.

104. (b); The paragraph is about the new features in the Windows 10, which will make its look better for the users. **cdae** forms a coherent paragraph whereas option (b) has no role to play in this particular paragraph as it talks about a specific feature of Windows which will make it harder for hackers to exploit vulnerabilities in the OS. Hence (b) is the correct choice for elimination.

105. (c); A should follow C and D should follow A. E-F makes a combination. Hence **CADBEF** is the correct sequence to form a meaningful paragraph.

106. (c); **Minimal** means a minimum amount, quantity, or degree; negligible.

107. (b); "**Ways** and **damaged**" is the correct choice.

108. (a); **Defender** means a person who defends someone or something.

109. (d); **Hypocrisy** means the practice of claiming to have higher standards or more noble beliefs than is the case.

110. (e); **Sturdy** means **showing confidence and determination. Counter** means **speak or act in opposition to**.

111. (d); Use 'hard up' in place of 'hard down' as '**be hard up**' is an **idiom** that means '**be short of money**'. E.g. He is hard up these days.

112. (b); Use 'of' after 'admits' as '**admit of**' means '**can have**' but 'admit somebody into a house/someplace' means 'allow somebody to enter a place'. e.g. The words admit of other meanings.

113. (e); Replace 'for' with 'to' as the usage of 'go to the cinema, go to the circus, go to the theatre, go to the opera' is idiomatic. e.g. He wants to go to the cinema. (and not 'for the cinema')

114. (a); Use 'go' in place of 'went' because after 'do, does, did', first form of verb is used.

115. (b); Use 'has' after 'he' i.e. "…but he has also built a few bungalows in this city."

116. (a); Despite pervasive and ruthless state political control, the increasingly desperate need for foreign investment is forcing Havana's geriatric communists to loosen their iron grip.

117. (b); (ii) In context of continuing uncertainty in the agriculture sector because of substantial dependence on rain-fed irrigation, an alternative power pack, unutilized, is micro, small and medium enterprises (MSMEs).

118. (a); Only (i) is correct.
(i) To counter growing isolation from the West, the Kremlin has implemented an offensive policy of multilateralism with the great rising powers, in particular with China in the framework of the Shanghai Cooperation Organisation (SCO).

119. (b); "helping to respond to the" is the correct phrase to be filled in the blank.

120. (d); "is being ignored in" is the correct phrase to be filled. Present continuous tense will be used in the sentence.

Mock 54

RBI Grade-B Phase I 2016

REASONING ABILITY

Direction (1-5): Study the following information carefully and answer the given questions.
Eight friends M, N, O, P, Q, S, T and U, out of whom one is a Civil Engineer, Cost Estimator, Drafter, Marine Biologist, Photographer, Reporter, Statistician and Writer (but not necessarily in the same order), are sitting around a circular table, facing the centre.
P who is a Reporter sits third to the right of U. The Cost Estimator and the Writer are immediate neighbours of each other; neither the Cost Estimator nor the Writer is an immediate neighbour of U and P. The Statistician and the Civil Engineer are immediate neighbours of each other. Neither U nor T is a Civil engineer. The one who is a Cost Estimator sits second to the right of Q who is a Photographer. S who is a Statistician is not an immediate neighbour of the Reporter. Only O sits between the Cost Estimator and the Marine Biologist. M sits third to the right of the Civil Engineer.

1. Which of the following pairs represents the immediate neighbours of the Marine Biologist?
(a) Cost Estimator – Drafter
(b) Civil Engineer - Cost Estimator
(c) Statistician – Drafter
(d) Photographer - Writer
(e) None of these

2. What is the position of the Drafter with respect to the Civil Engineer?
(a) Third to the left
(b) Second to the left
(c) Immediately to the right
(d) Fourth to the right
(e) Second to the right

3. Who sits third to the right of the Cost Estimator?
(a)The Reporter
(b) N
(c)The Statistician
(d) The Photographer
(e) None of these

4. Which of the following is true regarding O?
(a) O is a Marine Biologist
(b) O is an immediate neighbour of the Civil Engineer
(c) O sits between N and Q
(d) O is an immediate neighbour of the Cost Estimator
(e) None of these

5. How many people sit between the 'Reporter' and 'T' when counted in anticlockwise direction from the Reporter?
(a) None (b) One (c) Two
(d) Three (e) Four

Direction (6-10): Study the following information carefully and answer the given questions.
Seven institutes 24X, 7VB, 365ON, ALL, D&N, 30DC and MK100 provide coaching for seven different subjects, viz. Maths, English, Social Science, Life Science, Economics, Ethics and Sanskrit, but not necessarily in the same order. There is one day weekly off in each institute from Monday to Sunday but not necessarily in the same order. No two institutes have the same weekly off day.
(i) Institute 365ON provides coaching for English and is not closed on Friday and Wednesday.
(ii) Institute ALL provides coaching for Maths, and Thursday is its weekly off day.
(iii) Institutes D&N and 30DC do not provide coaching for Economics and neither of these has Wednesday as weekly off day
(iv) Institute 7VB provides coaching for Life Science and remains closed on Sunday.
(v) The one which provides coaching for Ethics has Tuesday as weekly off day.
(vi) Institute MK100 provides coaching for Sanskrit and remains closed on Monday.
(vii) Institute D&N does not provide coaching for Social Science.

6. Institute 365ON remains closed on which of the following days?
(a) Sunday (b) Monday (c) Tuesday
(d) Saturday (e) None of these

7. Which of the following institutes provides coaching for Economics?
(a) 24X (b) D&N (c) 30DC
(d) D&N or 30DC (e) None of these

8. Which of the following combinations is correct?
(a) Wednesday — 7VB — Life Science
(b) Wednesday — 7VB — Economics
(c) Friday — 30DC — Social Science
(d) Thursday — ALL— Ethics
(e) None of these

9. Which institute provides coaching for Ethics?
(a) 24X (b) 30DC (c) D&N
(d) ALL (e) None of these

10. On which of the following days does Institute 30DC remains closed?
(a) Tuesday
(b) Wednesday
(c) Sunday
(d) Can't be determined
(e) None of these

Directions (11-15): In each question below are given three statements followed by four conclusions numbered I, II, III and IV. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements, disregarding commonly known facts.

11. Statements: A. No spoons are plates
B. All plates are bowls
C. All bowls are utensils
Conclusions: I. No spoons are bowls
II. No spoons are utensils
III. Some bowls are not plates
IV. Some utensils are not plates
(a) Only I follow (b) Only III follows
(c) Only IV follows (d) None follows
(e) None of these

12. Statements: A. Some roses are leaves
B. Some leaves are plants
C. Some plants are flowers
Conclusions: I. No roses are flowers
II. No plants are roses
III. Some leaves are flowers
IV. Some plants are roses
(a) None follows (b) Only I and II follow
(c) Only II and III follow (d) All follow
(e) None of these

13. Statements: A. Some sweets are chocolates
B. All chocolates are fruits
C. Some fruits are vegetables
Conclusions: I. Some sweets are vegetables
II. Some chocolates are vegetables
III. Some fruits are not sweets
IV. Some fruits are not vegetables
(a) Only I follow (b) Only II follows
(c) Only III follows (d) None follows
(e) None of these

14. Statements: A. No reynolds are jetters
B. No jetters are finegrips
C. All finegrips are pens
Conclusions: I. No jetters are reynolds
II. Some jetters are not finegrips
III. Some finegrips are pens
IV. Some pens are finegrips
(a) All follows
(b) Only I, II and III follow
(c) Only II, III and IV follow
(d) Only I, II and IV follow
(e) None of these

15. Statements: A. Some officers are gentlemans
B. All graduates are officers
C. All intelligents are graduates
Conclusions: I. Some gentlemans are officers
II. All intelligents are officers
III. Some officers are not intelligents
IV. All officers are intelligents
(a) Only I, II and III follow
(b) Only I, II and IV follow
(c) Only I and II follow
(d) Only I and III follow
(e) None of these

Directions (16-20): Study the following information carefully and answer the given questions.
Eight friends L, M, N, O, P, Q, R and T, who live in Australia, planned for different places to enjoy their summer vacation. The places are – Great Barrier Reef, Sydney, Bora Bora, Fiji, Queenstown, Tahiti, Gold Coast and Melbourne. They left for these destinations with different bikes. These bikes are Mountain, Hybrid, BMX, Folding, Recumbent, Tandem, City and Cruiser. The names of the destinations and also those of the bikes are not necessarily in the same order as the names of the persons. Note that each person left for his destination by his own bike. No person has more than one bike.
N, who left for Tahiti, has neither a Recumbent nor a City bike, whereas M has a Hybrid bike and did not leave for Sydney and Gold Coast. But the person who has Folding bike left for Great Barrier Reef.
One of them, who own a Mountain bike, left for Fiji. And the person who left for Sydney owns a BMX bike, but his neighbour T did not leave for Great Barrier Reef. M left for Melbourne.
One who left for Bora Bora has Cruiser bike. Q and R left for Gold Coast and Fiji respectively.
P left for Sydney whereas O, who neither has a Recumbent nor a Tandem bike, left for Queenstown.

16. Who owns Cruiser bike?
(a) O (b) T (c) L
(d) Data Inadequate
(e) None of these

17. L left for his destination by which of the following bike?
(a) Cruiser (b) Folding (c) City
(d) Recumbent (e) None of these

18. One who left for Tahiti was travelling in
(a) Cruiser (b) Hybrid
(c) Recumbent (d) City
(e) None of these

19. Which of the following is correctly matched?

Persons	Places	Bikes
(a) O	Sydney	City
(b) P	Queenstown	BMX
(c) Q	Gold Coast	Mountain
(d) R	Fiji	Recumbent

(e) None of these

20. Who owns Hybrid bike?
(a) The one who left for Tahiti
(b) The one who left for Melbourne
(c) The one who left for Queenstown
(d) The one who left for Bora Bora
(e) None of these

Directions (21-25): In the following question each of the following questions, assuming the given statements to be true, find which of the two conclusions I and II given below them is/are definitely true. Give answer
(a) If only conclusion I is true.
(b) If only conclusion II is true.
(c) If either conclusion I or II is true.
(d) If neither conclusion I nor II is true.
(e) If both conclusions I and II are true.

21. Statements: P=R, Y≥T, U≥V
Conclusions: I. V>U II. Y=R

22. Statements: P≤D, D>Z, D≤X
Conclusions: I. D≥P II. P≤Z

23. Statements: L≤M, N=O, N≥A
Conclusions: I. N≥MII. O≥M

24. Statements: P≥H, Z≤J, H≥J
Conclusions: I. J≤P II. Z≤H

25. Statements: A>B, P≥L, L=S
Conclusions: I. B≥L II. L<B

Directions (26-27): In making decision about important questions, it is desirable to be able to distinguish between "strong" arguments and "weak" arguments. "Strong" arguments must be both important and directly related to the question. "Weak" arguments may not be directly related to the question and may be of minor importance or may be related to the trivial aspects of the question.
Each question below is followed by two arguments numbered I and II. You have to decide which of the argument is a "strong" argument and which is a "weak" argument.
Give answer (a) if only argument I is strong.
Give answer (b) if only argument II is strong.
Give answer (c) if either argument I or II is strong.
Give answer (d) if neither argument I nor II is strong.
Give answer (e) if both arguments I and II are strong.

26. Should graduation be made minimum educational qualification for entry level jobs in any public sector organization?
Arguments:
I: Yes, graduates always perform better than the non-graduates by virtue of their higher level of education.
II: No, there are quite a few people who cannot afford to remain un-employed till the completion of gradation and are capable of performing equally well as the graduate candidates.

27. Should the examination bodies for all university examination permit the use of calculators?
Arguments:
I: No, it is necessary for the students to know the methods of manual calculation to make their concepts clear.
II: Yes, manual calculations are no more required with extensive use of computers in all fields.

Direction (28-29): Read the following passage and answer the given questions according to the passage:
The Maharashtra government's decision to promulgate an ordinance to exempt farmers from having to mandatorily sell their fruit and vegetable crop at mandis governed by a 1963 law on marketing farm produce is a bold and laudable step. Chief Minister Devendra Fadnavis has stood his ground against the powerful lobby of middlemen, who shut shop in protest, is even more commendable. The problem with the present regime, under which produce has to be sold through Agricultural Produce Market Committees, is that farmers seldom benefit from price movements; traders rake in the upside that consumers are forced to shell out.

28. Which of the following can be concluded from the given passage?
(i) This will encourage the farmers to grow more crops.
(ii) Similar steps will be implemented in other produces.
(iii) Now, the farmers will definitely get a good price for their hard work.
(a) All except (i)
(b) All of the above
(c) All except (ii)
(d) Only (i)
(e) None of the above

29. What are the feasible problems of the farmers which can be observed from the passage?
(i) Money for the produce is never given on the spot.
(ii) The values are decided by the "buyers" who are usually middleman, even if government system is involved.
(iii) The inputs are under the clutches of Multinational Corporations.
(a) All of the above (b) All except (iii)
(c) All except (ii) (d) All except (i)
(e) None of the above

30. Statement: The relationship between income and expenditure is the consumption schedule or consumption function in economics. When disposable income rises, consumption increases. As the disposable income increases, the average propensity to consume falls. In other words, the consumer spends a smaller percentage of the extra dollars. Consumption increases with increased income, but short-term increases affect consumption less than long-term increases. For an income increase of a year or less duration, consumers tend to change spending habits less than for permanent increases in income.
In order to reduce the gap between income and expenditure, the company has decided to increase the prices of its product from next month.
Assumptions:
I. The rate will remain more or less the same after the increase.
II. The expenditure will more or less remain the same in near future.
III. The rival companies will also increase the price of the similar products.
You have to assume everything in the statement to be true, and then decide which of the three given assumptions logically follows.
(a) Only I and II are implicit
(b) Only II and III are implicit
(c) Only III is implicit
(d) All are implicit
(e) None of these

Directions (31-35): Study the following information carefully to answer the given questions.
A word and number arrangement machine when given an input line of words and numbers rearranges them following a particular rule in each step. The following is an illustration of input and rearrangement.
Input: say to 12 by 29 all 71 same 53 81 above 61
Step I: above say to by 29 all 71 same 53 81 61 12
Step II: above same say to by all 71 53 81 61 12 29
Step III: above same say all to by 71 81 61 12 29 53
Step IV: above same say all to by 71 81 12 29 53 61
Step V: above same say all to by 81 12 29 53 61 71
Step VI: above same say all to by 12 29 53 61 71 81
Step VI is the last step of the above input. Now, the following questions are based on the given input.
Input: toy 18 till 24 36 is of never 87 99 cut 73

31. Which of the following will be the penultimate step?
(a) Step VI (b) Step V (c) Step IV
(d) Step III (e) None of these

32. What will be the position of 'is' in the last but one step?
(a) Seventh from the left
(b) Sixth from the right
(c) Sixth from the left
(d) Fifth from the left
(e) None of these

33. Which word/number would be the fourth from the right end in Step IV?
(a) cut (b) 18 (c) 24
(d) 99 (e) 73

34. How many steps will be required to give the final output?
(a) Five (b) Four (c) Six
(d) Seven (e) Eight

35. Which step would give the following output: 'never till toy cut is of 87 99 73 18 24 26'?
(a) Step IV (b) Step III
(c) Step II (d) Step V
(e) There will be no such step

Directions (36-40): Study the following information carefully and answer the given questions.
Ten persons are sitting in two parallel rows containing five persons each. In row 1, Q, M, N, O and P are sitting and all of them are facing south. In row 2, H, I, J, K and L are sitting and all of them are facing north. In the given seating arrangement, each member seated in a row faces another member of the other row. Moreover, each of them belongs to different cities — Toronto, Ottawa, Montreal, Calgary, Edmonton, Hamilton, Winnipeg, Moncton, Brampton and Brantford but not necessarily in the same order.
There are only two persons sitting between the person from Toronto, who sits at an extreme end, and P. H, who sits in the middle of the row, is not an immediate neighbour of I, who is not from Brantford. L is sitting at an extreme end. P, from Edmonton, sits on the immediate right of the person from Ottawa and faces the immediate neighbour of I. M is not sitting at the extreme left end. H is not from Brampton. There is only one person sit between N and O, who is from Toronto. K, from Hamilton, is an immediate neighbour of the person from Brantford and does not face the person from Montreal. J, who is from Calgary, is an immediate neighbour of the person from Brampton, who in turn faces the immediate neighbour of the person from Edmonton. There are two persons between the person from Winnipeg and the person from Montreal. M is not from Winnipeg. L is not from Moncton.

36. L belongs to which of the following cities?
(a) Moncton (b) Winnipeg
(c) Montreal (d) None of these
(e) can't be determined

37. Who is from Moncton?
(a) J (b) M (c) L
(d) H (e) can't be determined

38. 'Edmonton' is related to 'Calgary' and 'Toronto' is related to 'Brampton' in a certain way, based on their seating positions. Then, Ottawa is related to which of the following according to the same seating positions?
(a) Moncton (b) Brampton (c) Montreal
(d) Hamilton (e) Calgary

39. Four of the following five are alike in a certain way based on their seating positions and so form a group. Which of the following is different from the group?
(a) Edmonton (b) Winnipeg (c) Brantford
(d) Calgary (e) Hamilton

40. Which of the following statement(s) is/are definitely false?
(a) M is from Montreal.
(b) There are two persons sitting between the person from Hamilton and the person from Brampton.
(c) The person from Ottawa faces the person from Moncton.
(d) The person who is from Brampton sits opposite the person from Toronto.
(e) All are true

Directions (41-45): Study the following information to answer the given question:
In a certain code,
'always create new ideas' is written as "ba ri sha gi'.
'ideas and new thoughts' is written as 'fa gi ma ri'.
'create thoughts and insights' is written as 'ma jo ba fa'
and 'new and better solutions' is written as 'ki ri to fa'.

41. What is the code for 'ideas'?
(a) sha (b) ba (c) gi
(d) ma (e) Cannot be determined

42. What does 'fa' stand for?
(a) thoughts (b) insights (c) new
(d) and (e) solutions

43. 'fa lo ba' could be a code for which of the following?
(a) thoughts and action (b) create and innovate
(c) ideas and thoughts (d) create new solutions
(e) always better ideas

44. What is the code for 'new'?
(a) ki (b) ri (c) to
(d) fa (e) ba

45. Which of the following may represent 'insights thoughts always'?
(a) jo ki to (b) ki to ri
(c) sha jo ri (d) ma sha jo
(e) sha to ba

Directions (46-50): In each of the questions below consists of a question and two statements numbered I and II given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and Give answer
(a) If the data in statement I alone are sufficient to answer the question, while the data in statement II alone are not sufficient to answer the question.
(b) If the data in statement II alone are sufficient to answer the question, while the data in statement I alone are not sufficient to answer the question.
(c) If the data either in statement I alone or in statement II alone are sufficient to answer the question
(d) If the data given in both statements I and II together are not sufficient to answer the question.
(e) If the data in both statements I and II together are necessary to answer the question.

46. How is 'No' coded in the code language?
Statements:
I. 'Ne Pa Sic Lo' means 'But No None And' and 'Pa Lo Le Ne' means 'If None And But'.
II. 'Le Se Ne Sic' means 'If No None Will' and 'Le Pi Se Be' means 'Not None If All'.

47. Who among P, Q, T, V and M is exactly in the middle when they are arranged in ascending order of their heights?
Statements:
I. V is taller than Q but shorter than M.
II. T is taller than Q and M but shorter than P.

48. How is M related to N?
Statements:
I. P, who has only two kids, M and N, and is the mother-in-law of Q, who is sister-in-law of N.
II. R, the sister-in-law of M and is the daughter-in-law of S, who has only two kids, M and N.

49. What is the colour of the fresh grass?
Statements:
I. Blue is called green, red is called orange and orange is called yellow.
II. Yellow is called white, white is called black, green is called brown and brown is called purple.

50. Which train did Aman catch to go to office?
Statements:
I. Aman missed his usual train of 10.25 a.m. A train comes in every 5 minutes.
II. Aman did not catch the 10.40 a.m. train or any train after that time.

Directions (51-53): In each question below is given a statement followed by two courses of action numbered I and II. A course of action is a step or administrative decision to be taken for improvement, follow-up or further action in regard to the problem, policy etc. on the basis of the information given in the statement. You have to assume everything in the statement to be true. Then decide which of the two given suggested courses of action logically follows for pursuing. Give answer
(a) If only I follows.
(b) If only II follows.
(c) If either I or II follows.
(d) If neither I nor II follows.
(e) If both I and II follow.

51. Statement: According to a report, energy-guzzling technologies that we use at home destroy the environment.

Courses of action:

I. An effort should be made to discourage use of energy-guzzling technologies.

II. A special tax should be imposed on the use of such technologies.

52. Statement: Militants are now attacking the police in several states of India in a bid to demoralize them and to choke the intelligence network.

Courses of action:

I. Government should formulate a plan to equip its policemen with sophisticated weapons and equipment besides making an effort to end militancy in a peaceful way.

II. The police department should send strict instructions to all the police officers concerned that every policeman on duty should have proper gear like a bullet- proof vest and automatic weapons to counter any sudden attack.

53. Statement: With more airlines crossing the Indian skies and air travelling become more affordable, the infrastructure facilities at airports have remained grossly inadequate.

Courses of action:

I. All airports in India should be privatized.

II. A committee should be made to look into the matter and their recommendation should be sought to deal with the situation.

Directions (54-55): In each question below is given a statement followed by two conclusions numbered I and II. You have to assume everything in the statement to be true, then consider the two conclusions together and decide which of them logically follows beyond a reasonable doubt from the information given in the statement.

Give answer:

(a) if only conclusion I follows
(b) if only conclusion II follows
(c) If either I or II follows
(d) if neither I nor II follows and
(e) if both I and II follow

54. Statement: Until our country achieves economic equality, political freedom and democracy would be meaningless.

Conclusions:

I. Political freedom and democracy go hand in hand.

II. Economic equality leads to real political freedom and democracy.

55. Statement: "The Government will review the present policy of the diesel price in view of further spurt in the international oil prices". – A spokesman of the Government.

Conclusions:

I. The Government will increase the price of the diesel after the imminent spurt in the international oil prices.

II. The Government will not increase the price of the diesel even after the imminent spurt in the international oil prices.

Directions (56-60): Study the following information carefully and answer the given questions.

N, T, P, S, C, K, G and Y are going to three destinations, viz. Kochi, Chennai and Hyderabad, in three vehicles— Duster, Fortuner and Endeavour. There are three females among them and not more than three persons can sit in a car. P is the sister of C and is going to Hyderabad. G is travelling with her brothers only. N is neither travelling in Fortuner nor he is going to Hyderabad. T is travelling with C and may be accompanied with somebody, except N. K is not travelling with Y and she is going to Chennai. S is travelling in Duster but neither with C nor with P. Those who are travelling in Fortuner are going to Kochi. T is not travelling with P.

56. Members of which of the following cars are going to Hyderabad?

(a) None (b) Endeavour (c) Duster
(d) Fortuner (e) Either Endeavour or Duster

57. In which of the following cars are only two members travelling?

(a) Fortuner (b) Endeavour (c) Duster
(d) Either Endeavour or Duster
(e) Either Fortuner or Duster

58. Members of which of the following groups are going to Kochi?

(a) P, Y and G (b) G, C and T (c) Y, T and P
(d) N, K and S (e) None of these

59. Who is travelling with K?

(a) Only N (b) Only S
(c) Both N and S (d) Can't be determined
(e) None of these

60. Which of the following combinations is true?

(a) P—Duster —Hyderabad
(b) K—Fortuner —Kochi
(c) S— Endeavour —Chennai
(d) G— Fortuner —Kochi
(e) T— Endeavour — Hyderabad

QUANTITATIVE APTITUDE

Directions (61-65): Find the wrong number in the series:

61. 15, 23, 50, 112, 239, 455
(a) 50 (b) 23 (c) 112
(d) 455 (e) None of these

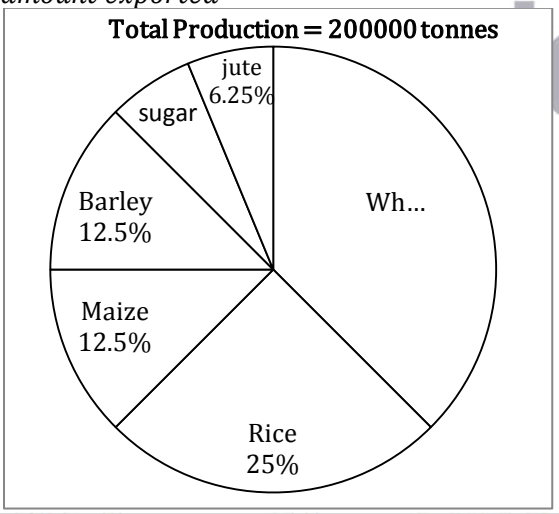
62. 12, 22, 63, 246, 1235, 7404
(a) 246 (b) 7404 (c) 12
(d) 63 (e) None of these

63. 312, 300, 264, 200, 120, 12
(a) 312 (b) 12 (c) 200
(d) 300 (e) None of these

64. 1252, 250, 60, 20, 9, 7
(a) 7 (b) 60 (c) 1252
(d) 250 (e) None of these

65. 12, 8, 16, 48, 169, 770.5
(a) 770.5 (b) 8 (c) 48
(d) 16 (e) 169

Directions (66-70): Given below is the pie chart which shows the percentage distribution of production of 6 different types of crop. Table shows the ratio of amount exported to the amount consumed within India, total sale obtained on selling whole quantity produced and percentage of sales obtained from export.
Note → Some values are missing in the pie chart and table, you have to calculate the values if required to answer the question.
Total production = total amount consumed in India + total amount exported



Crops	Ratio of amount exported to the consumed within India	Percentage of total sale obtained in export	Total sale (in Rs.)
Wheat	7 : 8	—	—
Rice	2 : 3	45%	6,00,000
Maize		35%	4,00,000
Barley	4 : 1	—	5,00,000
Sugar		$44\frac{4}{9}\%$	—
Jute	1 : 1	40%	3,12,500

66. If selling price per tonne of jute in India is equal to two times of selling price per tonne of Barley which is exported, then find the total sales of Barley in India?
(a) 250000 (b) 200000 (c) 350000
(d) 400000 (e) 300000

67. Selling price of one tonne of Rice which is exported is what percent more or less than selling price per tonne of Jute which is sold in India?
(a) 52% (b) 55% (c) 47%
(d) 48% (e) 53%

68. If amount Maize exported is 25% of amount of Maize consumed in India then price per tonne of maize consumed in India is what percent of price per tonne of Jute consumed in India.
(a) $66\frac{2}{3}\%$ (b) $33\frac{1}{3}\%$ (c) $43\frac{1}{3}\%$
(d) $53\frac{1}{3}\%$ (e) $45\frac{1}{3}\%$

69. If quantity of sugar consumed in India is 30% of the quantity of Barley which is exported and total production of Sugar is 250/3% less than total quantity of wheat produced from then find the total quantity of sugar exported
(a) 4000 (b) 7000 (c) 6000
(d) 4500 (e) 6500

70. If the total sale of wheat was Rs. 5719000 and the ratio of selling price of one unit of wheat exported to selling price of one unit of wheat consumed within India is 2 : 3, then Find the selling price of one unit of wheat exported from India. It is also given that total production of wheat is 600% of total production of sugar
(a) Rs. 60.2 (b) Rs. 40.2 (c) Rs. 30.1
(d) Rs. 50.2 (e) None of these

71. A vessel contains 2.5 liters of water and 10 liters of milk. 20% of the contents of the vessel is removed. To the remaining contents, 'x' liters of water is added to reverse the ratio of water and milk. Then 'y' liters of milk are added again to reverse the ratio of water and milk. What is the value of 'y'?
(a) 120 (b) 100 (c) 90
(d) 140 (e) None of these.

72. A is thrice as good a workman as B and therefore is able to finish a job in 60 days less than B. If A and B complete $\frac{2}{3}$rd of the job and then A is replaced by C, the remaining job is done by B and C in 10 days.If A and B complete $\frac{3}{4}$th of the job and then B is replaced by D the remaining job is done by A and D in 5 days.How long will it take for A, B, C and D to complete the job working together?
(a) 12 days (b) 20 days (c) 15 days
(d) 14 days (e) None of these

73. P, Q and R are 3 small pumps fitted to a tank. S is a large pump fitted to the tank. Q is 50% more efficient than P. R is $33\frac{1}{3}\%$ more efficient than Q. S is 50% more efficient than R. All of the pipes are used to fill the tank. What is the ratio of the time taken by pumps P and R to fill the tank together to the time taken by pumps Q and S to fill the tank together ?
(a) 3 : 2 (b) 4 : 3 (c) 2 : 3
(d) 3 : 5 (e) None of these

74. If 10 men and 15 women complete a piece of work in 8 days, while 12 men and 8 women can complete the same piece of work in 10 days. If a boy is 50% less efficient than the man then find the time taken by 2 men, 4 women and 18 boys to complete the work.
(a) $\frac{20}{3} days$ (b) $\frac{40}{3} days$ (c) 27 days
(d) $\frac{50}{3} days$ (e) None of these

75. 2n years ago, the age of Raju was four times that of his son and n years ago, the age of Raju was thrice that of his son. If n years later, the sum of the ages of Raju and his son will be 80 years, then the difference in the ages of Raju and his son is
(a) 20 years (b) 40 years (c) 24 years
(d) 30 years (e) None of these

76. Speed of a boat in still water is 120% of its upstream speed in a river. After covering 105 km downstream it returns and covers $28\frac{4}{7}\%$ of distance covered in downstream. If time taken in downstream is 3 hours more than time taken in return trip then find the speed of current.
(a) 2 km/hr (b) 2.5 km/hr (c) 3 km/hr
(d) 4 km/hr (e) 3.5 km/hr

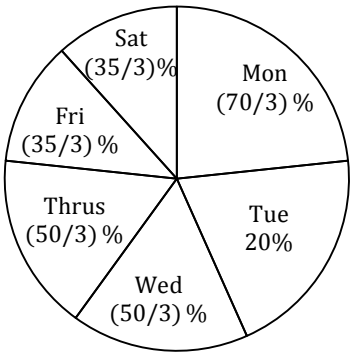
77. A, B and C invested on amount of 700, 500 and 1200 in an business for 1 year. If they invested more amount in the ratio 3 : 2 : 5 at the end of six months and total profit obtained at the end of year is Rs. 10,000 then find the profit share of C
(a) 2500 (b) 5000 (b) 3000
(d) 4000 (e) 6500

78. Veer bought some chairs and tables from a shopkeeper which are in ratio 9 : 8. Marked price of a chair and a table is in ratio 5 : 7 shopkeeper gives discount of 20% and 25% on chairs and tables respectively. If total discount offered is 4600 Rs. Find the total selling price of chairs
(a) 6000 (b) 4800 (c) 3600
(d) 7200 (e) 5000

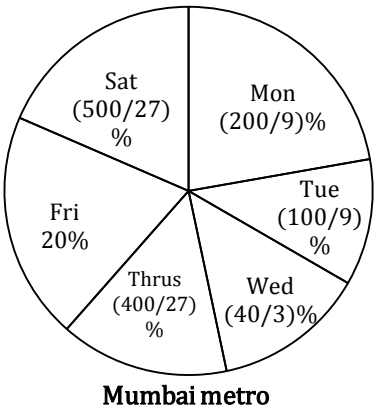
79. Wheat of x Rs./kg is mixed with wheat of y Rs./kg in the ratio 2 : 3. On selling the mixture at 49 Rs./kg there is a gain of $16\frac{2}{3}\%$. If the quantity in which they were mixed is reversed and selling price remains same, then gain percent becomes $\frac{550}{19}\%$. What is the volume of 'x'.
(a) 25 Rs./kg (b) 30 Rs./kg (c) 28 Rs./kg
(d) 32 Rs./kg (e) 20 Rs./kg

80. Four persons started to do a work together. 'A' works only in starting two days after that B, C and D works alternately starting from B. Ratio of time taken by A, B, C and D if they work alone is 4 : 3 : 2 : 5. If the work is completed in 12 days then in how many days A and C can complete the work if they work together ?
(a) 6 days (b) 12 days (c) 10 days
(d) 8 days (e) None of these

Directions (81-85): Given below are the two pie charts which shows the percentage distribution of people who travel a certain distance in Delhi metro and Mumbai metro on six different days of the week starting from Monday to Saturday.



Delhi metro



Mumbai metro

Note:
1. Ratio of total person travelling in these six days in Delhi metro to Mumbai metro is 10 : 9
2. Difference between person travelling in Delhi metro and Mumbai metro on Wednesday is 70.

81. If fare per person in Delhi metro and Mumbai metro on all days for the particular distance is Rs. 18 and Rs. 20 respectively then what is the difference between total fare obtained by both metro on Saturday.
(a) 1375 (b) 1750 (c) 1850
(d) 1700 (e) 1650

82. If in both metro, number of people travelling on Sunday of same week decreases by 'x' with respect to people travelling on Saturday then the ratio of people travelling in Delhi metro to Mumbai metro on Sunday is 2 : 3, then find the value 'x'
(a) 20 (b) 30 (c) 22
(d) 24 (e) 25

83. Number of people travelling in Delhi metro on Wednesday and Thursday together is what percent of people travelling in Mumbai metro on Monday and Saturday together ?
(a) $90\frac{10}{11}\%$ (b) $89\frac{10}{11}\%$ (c) $90\frac{2}{11}\%$
(d) $92\frac{8}{11}\%$ (e) $95\frac{5}{11}\%$

84. If fare per person of Delhi metro to Mumbai metro is 10 : 9 on all days and sum of fare obtained from both metro on Tuesday is Rs. 4350, then total fare obtained from Delhi metro on Monday is what percent more or less than total fare obtained from Mumbai metro on Saturday.
(a) $46\frac{4}{9}\%$ (b) $45\frac{4}{9}\%$ (c) $55\frac{5}{9}\%$
(d) $54\frac{4}{9}\%$ (e) $52\frac{5}{9}\%$

85. If on Sunday of same week, person who travel by Delhi metro and Mumbai metro are increased by 20% and 30% respectively over Saturday, then total people who travelled by both metro on Sunday is what percent of total people who travelled by both metro on Monday.
(a) $81\frac{5}{17}\%$ (b) $87\frac{2}{13}\%$ (c) $93\frac{4}{15}\%$
(d) $82\frac{4}{13}\%$ (e) $78\frac{3}{13}\%$

Directions (86 – 90): Given below the table which shows the total population of children in (Lakh) who attends school in five different states and percentage of boys in these students. Table also shows the total number of school in these five states.
Some values are missing in the table. You have to calculate these values if required to answer the question.

States	Total children who attend school	% of boys who attended school	Number of schools
West Bengal	48	$62\frac{1}{2}\%$	960
UP	–	$46\frac{3}{7}\%$	1400
Orissa	–	50%	2000
Bihar	–	$55\frac{5}{9}\%$	–
Karnataka	–	$66\frac{2}{3}\%$	2400

86. If average number of students per school who attend school in Orissa is 4000 and for Karnataka it is 2500 then find the total number of girls in these two states who attend school.
(a) 70L (b) 60L (c) 50L
(d) 45L (e) 65L

87. Total number of girls who attend school in west Bengal are what percent of total boys in UP who attend school if average number of students per school who attend school in UP is 4000.
(a) $69\frac{3}{13}\%$ (b) $68\frac{4}{13}\%$ (c) $53\frac{4}{13}\%$
(d) $55\frac{11}{12}\%$ (e) None of these

88. By what percent number of schools in Karnataka should be decreased so that number of students per school who attend school in Karnataka becomes equal to number of students per school who attend school in West Bengal if total students who attended school in Karnataka is 25% more than total students who attend school in west Bengal.
(a) 60% (b) 40% (c) 45%
(d) 55% (e) 50%

89. What is the average number of school in all five states if total number of boys who attend school in Bihar is 40 lakh and average number of students per school who attend school in Bihar is 4000.
(a) 1780 (b) 1630 (c) 1712
(d) 1535 (e) 1820

90. If average student per school in West Bengal, U.P., Orissa and Karnataka are in the ratio 10 : 8 : 8 : 5 and total girls in Bihar who attend school are 32L then find the total students in all five states who attend school.
(a) 280L (b) 316L (c) 392L
(d) 345L (e) 290L

ENGLISH LANGUAGE

Directions (91-95): Read the following passage carefully and answer the questions given below it. Certain words/phrases in the passage are printed in bold to help you locate them while answering some of the questions.

That women in India are much more financially excluded than the men is evident from the figures as of March 2011. Only 21 per cent of total bank deposit accounts were held by women and these accounted for just about 12 per cent of the total volume of deposits. Similarly, women availed only 18 per cent of the total small credit from banks in 2011. The problem must be understood in the context of larger issues arising from the underprivileged status of a woman in India.

Finance minister P Chidambaram has proposed to deal with the financial exclusion of Indian women by setting up a women's bank. There are two reasons why the idea is not **exciting** for some of us. First, merely setting up an all-women bank is not likely to address the **core** issue of attitudinal bias against women, which is so prevalent in our banking institutions. Second, there is both overt and covert exclusion in the system. Second, there is no guarantee that the all-women bank is going to **mitigate** the problem of financial exclusion of Indian women. My scepticism also **stems** from the limited success of other previous attempts at focused banking, such as the setting up of the regional rural banks.

In order to assess the likely impact of the proposed women-only bank, it would be interesting to draw an analogy with the launching of the regional rural banks in the 1970s. The RRBs were set up in 1976 as special conduits of credit delivery in rural India. They were supposed to combine the "local feel and familiarity of rural problems with the professional and large resource base of commercial banks". Thus, there was an acknowledgement that mainstream commercial banks could not effectively cater to the needs of the villages, so a new type of locally oriented banks, the RRBs had to be set up. This is very similar to the proposed women's bank's ambition "to address the gender-related issues of financial inclusion".

On the face of it, there is nothing wrong in setting up new institutions that target specific segments of the population. However, we have seen in the case of the RRBs that, less than ten years into operation, their financial viability became a matter of concern. Starting from 1981, more than 10 committees were set up to address various issues (of financial viability, reconstruction and amalgamation, manpower and human resources and technological upgradation) relating to operation of the RRBs. Following this, the RRBs went through the process of recapitalisation and amalgamation so as to make them financially sound. Due to amalgamation and mergers, some RRBs have become large entities that defeat the very concept of "locally oriented" banks.

Ironically the number of urban and metropolitan branches of RRBs has increased over the years, while that of their rural branches has declined. Between 1992 and 2009, there was a 22-percentage point decline in the proportion of rural bank branches of RRBs while there was a 16-percentage point increase in the share of their non-rural branches. Thus the creation of "localized rural banks" as a means for tackling the "lack of familiarity of rural problems on the part of mainstream commercial banks" does not seem to have served its purpose. In fact, rural India is much more financially excluded today when compared to the 1990s, both in terms of banking outlets and availability of institutional credit.

Going by this analogy, it must be asked if the women-only bank can promote financial inclusion of Indian women unless we address the core issue of exclusion at a more fundamental level. Additional changes in our banking system should be an essential and integral part of all our efforts to promote financial inclusion. Not too long ago, the Rangarajan Committee on financial inclusion had emphasised the correction of mindsets of the bank staff. Citing a study conducted in Madhya Pradesh, the committee highlighted that the "majority of the bank branch manager held negative attitudes towards lending to (the) poor, although (the) poor, if guided properly, not only succeed as entrepreneurs but also are good repays". There is no doubt that if the poor happens to be a woman, this **discrimination** gets doubled.

91. Why is the author apprehensive about the success of the women's bank?
- (a) Because women are not so competent as men.
- (b) Because previous attempts at focused banking such as the setting up of the RRBs have shown limited success.
- (c) Because there is no ready infrastructure for the setting up of the all-women's bank.
- (d) The government itself is under severe financial constraints as of now.
- (e) All the above

92. Find the incorrect statement regarding Regional Rural Banks.
- (a) The RRBs were set up as a special channel of credit delivery in rural India.
- (b) The RRBs were set up to cater to the needs of the villages.
- (c) The number of urban branches of RRBs has increased over the years.
- (d) The number of both rural and metropolitan branches of RRBs has increased over the years.
- (e) None of these

93. Which of the following statements is/are true about the operation of RRBs in the first decade of their inception?
(a) They did not reflect the desired results as expected at the time of their launch.
(b) To make the RRBs financially sound the process of mergers and amalgamation were adopted.
(c) Various committees were formed to address various issues related to operations of the RRBs.
(d) Only (a) and (c)
(e) All (a), (b) and (c)

94. What is/are the reason(s) for setting up of the all-women's bank?
(A) Financial inclusion of Indian women
(B) To address the core issue of attitudinal bias against women
(C) To provide financial assistance and loans only to women professionals
(a) All (A), (B) and (C) (b) Only (A) and (B)
(c) Only (A) and (C) (d) Only (B) and (C)
(e) Only (A)

95. Which of the following needs to be done to promote financial inclusion?
(a) General mindset towards women in general and poor women in particular needs to be changed.
(b) Women should be granted financial aids at comparatively low rate of interest.
(c) Women at village level should be educated through meetings, hoardings, banners and posters.
(d) It should be made mandatory to bring all rural women under the umbrella of financial inclusion.
(e) None of these

Directions (96-100): Read the following passage carefully and answer the questions given below. Certain words/phrases have been printed in bold to help you locate them.

The Working Group on Minorities at its Geneva session in May 2002 highlighted that constructive resolution of tensions involving minorities is by way of "integrating diversity". This means that persons belonging to minorities acting alone or in community should be given adequate opportunity to maintain and develop their distinct identities while at the same time participating in and making a contribution to the wider society and respecting the territorial integrity of the State.

Integrating diversity goes hand in hand with governance which is firmly grounded in international human rights law. This requires that States protect the rights of all those residing within their jurisdiction without distinction of any kind. It is immaterial whether these persons are recognised by the State as a national minority.

The Human Rights Committee functioning under the International Covenant on Civil and Political Rights, 1966 has expressed the view that to secure State protection, members of the minority community need not be citizens of the country nor its permanent residents. The protection extends to migrant workers who constitute a minority.

In order to accord this protection, States should take special measures to ensure the existence of conditions for minorities to maintain and develop their own distinct cultural identities. More specifically, what is required is: (A) sensitivity to the needs, especially linguistic and educational, of persons belonging to minorities so as to enable each individual to develop his/ her identity; (B) allowing minorities the opportunity to participate effectively in public life, including the political decision-making process; and (C) providing minorities with access to a fair share of public goods, including economic opportunity.

Such measures do not constitute preferential treatment. Their aim is to achieve equal and meaningful enjoyment of above rights in order to ensure de facto equality.

96. What should the state do to protect the rights of the minorities?
(a) They should create institutional set-up to monitor the integration of diverse sub-cultures of minorities.
(b) They should allow the Working Group on Minorities to come to the States and evaluate the conditions of minorities.
(c) They should allow and facilitate minorities to maintain and develop their own distinct cultural identities.
(d) They should join hands in eradication of poverty among minority communities.
(e) None of these.

97. Which of the following statements is/are true in the context of the passage?
(1) the Working Group on Minorities had met at Geneva in May 2002
(2) Integrating diversity means national solidarity and secularism
(3) integrating diversity and good governance are the two sides of the same coin
(a) only (1). (b) only (2) and (3).
(c) only (1) and (2). (d) only (1) and (3).
(e) all (1), (2) and (3)

98. What special measures should the State take to accord protection to minorities?
(a) Giving them preferential treatment
(b) Giving them social and political rights
(c) Providing them basic necessities of life.
(d) Inculcating in them the national pride and sentiments.
(e) Bringing them above the poverty line.

99. The term integrity diversity suggests that
(a) minorities have been subjected to social discrimination
(b) minorities should make contribution to the wider society
(c) conflicts involving minorities must be legalized.
(d) minorities should be given preferential treatment.
(e) Members of the minority community must be citizen of the country.

100. What is required of the State while maintaining integrating diversity?
(a) Protect the right of all residing within their jurisdiction without distinction of any kind.
(b) Provide employment opportunities to all as per the provisions in the constitution
(c) States should clearly state their policies regarding minorities.
(d) Formulate Human rights committee to supervise the status of minorities.
(e) Safeguard their territorial integrity.

Directions (101-105): Read each sentence to find out whether there is any grammatical error or idiomatic error in it. The error, if any, will be in one part of the sentence. The number of part is the answer. If there is no error, the answer is (e). (Ignore errors of punctuation, if any)

101. Money from poor countries (a)/ is flowing into richer ones (b)/ in large part due to the active purchase (c)/ of foreign assets by central banks. (d)/ No error (e)

102. (a) The teacher said / (b) to the students, Go through the / (c) notes as many times as possible / (d) lest you would fail. / (e) No error

103. (a) As soon as the peon / (b) rings the first bell, then all / (c) the students assemble / (d) on the ground for prayer. / (e) No error

104. Reading among the lines of a just-released optimistic report (a)/ on global flows of goods, services and finance by the McKinsey Global Institute, (b)/ one can conclude that the developed world is benefiting (c)/ more from globalization than the developing one. (d)/ No error (e)

105. (a) Hardly had he / (b) come out of the bus / (c) then the bomb exploded / (d) and shattered the bus into pieces. / (e) No error

Directions (106 – 110): In each of the following questions given below there are two blanks, each blank indicates that something has been omitted. Choose the set of words for each blank which best fits to the meaning of the sentence as a whole.

106. The toughest part of the job is to draw the line between the _____ of multiple voices and the _____ of concurrent monologues.
(a) polyphony, cacophony
(b) melody, overtone
(c) chorus, clash
(d) consonance, tune
(e) concert, jangle

107. North Korea believes that it now has a more powerful position at the _____ table, indeed to extract its endgame _____.
(a) exchange, answer
(b) trading, reversal
(c) bargaining, imperatives
(d) budget, integrity
(e) low-cost, duty

108. Adoption of digital payments has also witnessed a massive growth with a _____ in behaviour change as more people _____ digital payments in daily life.
(a) shifting, accept (b) fault, opt
(c) switch, shun (d) shift, adopt
(e) variation, follow

109. With nearly half of the world's population online, the research _____ the development of 60 countries, demonstrating their competitiveness and market _____ for further digital economic growth.
(a) chart, possible
(b) maps, potential
(c) draw, promising
(d) depicts, dormant
(e) surveys, future

110. Standing tall at $20 billion annually and still growing, the wildlife _____ has become the world's fourth largest _____ trade, said World Wide Fund for Nature (WWF) on Saturday -- the Global Tiger Day.
(a) sanctuary, poor
(b) violation, immoral
(c) population, unlawful
(d) crime, covert
(e) trafficking, illicit

Directions (111-117): In the following passage there are blanks, each of which has been numbered. These numbers are printed below the passage and against each, five words/phrases are suggested, one of which best fits the blank appropriately. Find out the appropriate word/phrase in each case.

The **...(111)...** of India as an economic superpower is not reflected in the **...(112)...** of life enjoyed by its 1.2 billion citizens according to the Human Development Index which **...(113)...** India very low among 182 countries.

In our performance oriented world, measurement issues have taken on **...(114)...** importance as what we measure affects what we do. In fact, the French President has established an international commission on the Measurement of Economic Performance and Social Progress owing to his **...(115)...** and that of others with the current state of statistical information about the economy and society.

The big question concerns **...(116)...** Gross Domestic Product (GDP) provides a good measure of living standards. In many cases GDP statistics seem to **...(117)...** that the economy is doing far better than most citizens feel it is.

111. (a) pursuit (b) perception (c) conversion (d) title (e) tribute

112. (a) quality (b) spirit (c) span (d) joy (e) loss

113. (a) scored (b) qualified (c) regard (d) ranked (e) counted

114. (a) great (b) unduly (c) trivial (d) considerably (e) negligible

115. (a) confidence (b) belief (c) dissatisfaction (d) compliance (e) obedience

116. (a) unless (b) because (c) against (d) whether (e) that

117. (a) recommend (b) think (c) point (d) refer (e) suggest

Directions (118-120): Four alternative summaries are given below each text. Choose the option that best captures the essence of the text. If none follows, choose (e) as your answer.

118. We race through our lives without pausing to consider who we really want to be or where we really want to go. We're wired up but we're melting down. Every one of our thoughts, emotions and behaviours has an energy consequence, for better or for worse. The ultimate measure of our lives is not how much time we spend on the planet, but rather how much energy we invest in the time that we have. The skilful management of energy, individually and organisationally, makes possible something that we call full engagement.
(a) Lacking full engagement, which means total investment of one's energy in an assigned job, we are losing the sense of direction and the notion of propriety.
(b) Man's success depends upon giving 100% in a work, without which he will fail to realize the direction he is heading towards or the goal he wants to get.
(c) We are so excessively busy that we fail to concentrate completely on a work and this dissipation of energy will either divert us or melt down our goal.
(d) The skilful management of energy, called full engagement, calls for specification of goal and a sense of direction.
(e) None of the above.

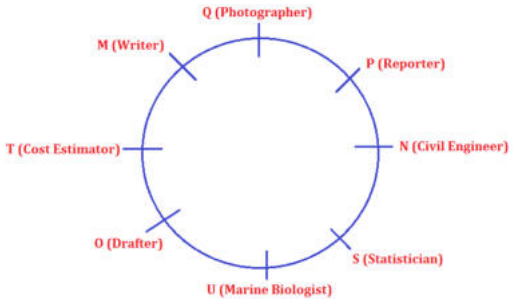
119. Some people think management is all about the people, and some people think management is all about the tasks. But great management is about leading and developing people and managing tasks. Learning to be a great manager by yourself isn't easy —even if you carefully observe great managers. One of the reasons good management is so hard to learn is that much of management takes place behind closed doors. Generally speaking, you can observe only the public behaviours of managers and how your managers interact with you.
(a) Public observation fails to teach management skill because management decisions take place behind closed door and as such leading people effectively becomes all the more difficult.
(b) Effective managerial skills are hard to learn because usually great managers work behind the closed doors and an aspirant usually has rare opportunity to interact with them.
(c) Great management which tends to develop people and manage effectively is rather difficult to imbibe even by observation.
(d) Observing great managers at works to learn the art of management usually fails to yield the desired result as managers don't share the trick of the trade.
(e) None of the above.

120. Climatologists, like economists, have many and divergent opinions about their subject. Climate change has the potential to severely reduce world food supplies, especially in poor and heavily populated areas. Food, water and energy resources are now at the stage where, by 2030, even quite small changes in climate could cause major famine. Because the drivers gain force by the Simple fact of their interaction, their coincidence presents unique dangers. The major cumulative effect of the drivers will be within the lifetime of most of us — certainly within that of our children. Can we avert it or at least soften its impact?
(a) The natural calamity is not a distant possibility as climate changes are expected to cause havoc on the world scenario, especially disrupting food supply.
(b) As food is the most important input of the world population, any aberration in its supply through climate changes is bound to create disaster.
(c) Food, water and energy being critical factors for world population, their absence or excessiveness presents a possibility of a great calamity through climatic changes.
(d) The three critical inputs – food, water and energy resources – are so balanced optimally that any disruption in this even through small climatic changes is bound to create havoc sooner than later.
(e) None of the above.

Solutions

REASONING ABILITY

Direction (1-5):



1. (c); 2. (a); 3. (c);
4. (d); 5. (c);

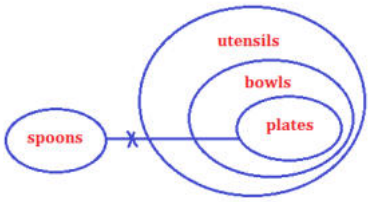
Direction (6-10):

Institute	Competitive Examination	Weekly off
24X	Economics	Wednesday
7VB	Life Science	Sunday
365ON	English	Saturday
ALL	Maths	Thursday
D&N	Ethics	Tuesday
30DC	Social Science	Friday
MK100	Sanskrit	Monday

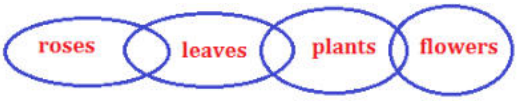
6. (d); 7. (a); 8. (c);
9. (c); 10. (e);

Directions (11-15):

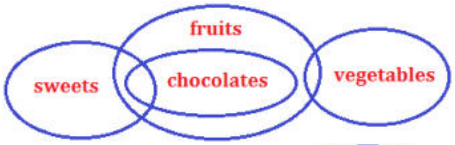
11. (d);



12. (e);

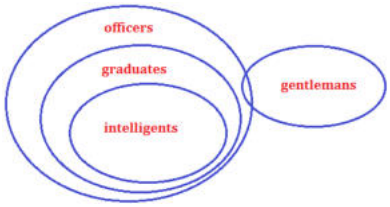


13. (d);



14. (a);

15. (e);



Directions (16-20):

Names	Destinations	Bikes
L	Great Barrier Reef	Folding
M	Melbourne	Hybrid
N	Tahiti	Tandem
O	Queenstown	City
P	Sydney	BMX
Q	Gold Coast	Recumbent
R	Fiji	Mountain
T	Bora Bora	Cruiser

16. (b); 17. (b); 18. (e);
19. (e); 20. (b);

Directions (21-25):

21. (d); $V > U$ does not follow
$Y = R$ does not follow

22. (a); $D \geq P$ follows
$P \leq Z$ does not follows

23. (d); $N \geq M$ does not follow
$O \geq M$ does not follow

24. (e); $J \leq P$ follows
$Z \leq H$ follows

25. (d); $L \leq B$ does not follow
$B > L$ does not follow

Directions (26-30):

26. (b); In a country where welfare is accorded high priority, stricter rules cannot be applied. Further, there is no need to make graduation the minimum educational qualification for entry level jobs in any public sector organization. Hence, Argument I is not strong Argument II is logically convincing.

27. (a); Only argument I seems to be strong. Any electronic device like computer can be used effectively if the concepts are clear.

28. (d); The government's decision will definitely encourage the farmers to grow more crops as they can sell their fruit and vegetable crops directly at mandis. The given passage deals with only agricultural produces. So, we can't say anything about other produces. The word 'definitely' in (iii) makes it vague. So, (ii) and (iii) cannot be concluded.

29. (b); It is mention in the passage that farmers seldom benefitted from price movements and it is also given that the Chief Minister is against the powerful lobby of middleman. So, (i) and (ii) are the feasible problems of the farmers. Whereas we can't say anything about its clutching power.

30. (e); Clearly, the company intends to reduce the gap between income and expenditure by increasing the price of its product i.e. by keeping the expenditure unaltered and increasing the income only. So, II is implicit while I is not. However, the rival companies may or may not follow the same pursuit. So, III is not implicit.

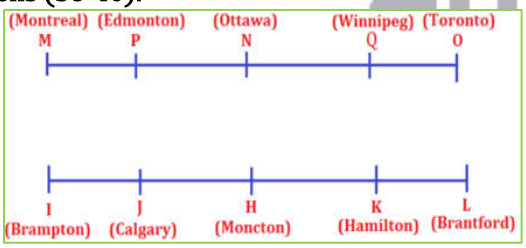
Directions (31-35): The machine rearranges the words and numbers in such a way that the words are arranged according to the number of letters in the words in descending order from left end and words having the same number of letters are arranged in reverse English alphabetical order, while numbers are arranged in ascending order on the right end in each step.

Input: toy 18 till 24 36 is of never 87 99 cut 73
Step I: never toy till 24 36 is of 87 99 cut 73 18
Step II: never till toy 36 is of 87 99 cut 73 18 24
Step III: never till toy cut is of 87 99 73 18 24 36
Step IV: never till toy cut of is 87 99 18 24 36 73
Step V: never till toy cut of is 99 18 24 36 73 87
Step VI: never till toy cut of is 18 24 36 73 87 99
Step VI is the final step.

31. (b); **32. (c);** **33. (b);**

34. (c); **35. (b);**

Directions (36-40):



36. (d); **37. (d);** **38. (a);**

39. (c); **40. (d);**

Directions (41-45):

always---------- sha
create---------- ba
new---------- ri
ideas---------- gi
and---------- fa
thought---------- ma
insights---------- jo
better/solution--- ki/to

41. (c); **42. (d);** **43. (b);**
44. (b); **45. (d);**

Directions (46-50):

46. (a); In the two statements given in I, the common words are 'But', 'None', 'And' and the
Common code words are 'Ne', 'Pa', 'Lo'. So, 'Ne', 'Pa' and 'Lo' are codes for 'But', 'None' and 'And'. Thus, in the first statement, 'Sic' is the code for 'No'.

47. (e); From I, we have: M > V > Q.
From II, we have: T > Q, T > M, P > T.
Combining the above two, we have:
P>T>M>V>Q
Clearly, M is in the middle.

48. (a); From I, we conclude that P is the mother of M and N, while Q is the daughter-in-law of P and sister-in-law of N. Thus, Q is M's wife and hence, M is N's brother.
From II, we conclude that M and N are the children of S. Also, R is the daughter-in-law of S and sister-in-law of M. So, R is N's wife and thus, N is M's brother. Hence, M is either brother or sister of N.

49. (b); The colour of fresh grass is 'green' and as given in II, 'green' is called 'brown'. So, the colour of fresh grass is 'brown'.

50. (d); From I and II, we conclude that Aman went to office by either 10.30 a.m. or 10.35 a.m. train.

Directions (51-55):

51. (a); I is advisable because it will reduce the problem. II is impractical. Hence, II is not advisable.

52. (e); Both I and II will reduce the problem. Good equipment will keep the policemen alert whereas good weapons will make them strong to face the situation. Meaningful dialogue can change the situation dramatically. Therefore, both I and II are advisable.

53. (b); I is not advisable. We need inspection to sort out the problem. II is advisable because it will be helpful to make strategies to solve out the problem.

54. (b); Nothing about the relation between political freedom and democracy is mentioned in the statement. So, I does not follow. But II directly follows from the given statement.

55. (c); The Government seeks to review the policy so as to determine whether the diesel price needs to be increased or it can be kept stable by adjusting certain other factors. So, either decision may be taken. Thus, either I or II follows.

Directions (56-60):

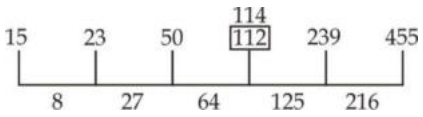
Fortuner ——— Kochi ——— T, C and G (-)
Duster ——— Chennai ——— K (-), N and S
Endeavour ——— Hyderabad ——— P (-) and Y

(-) sign denotes female members

56. (b); **57.** (b); **58.** (b);
59. (c); **60.** (d);

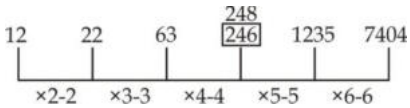
QUANTITATIVE APTITUDE

61. (c);



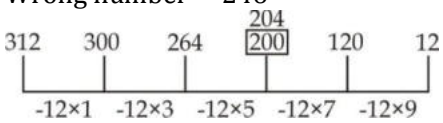
Wrong number = 112

62. (a);



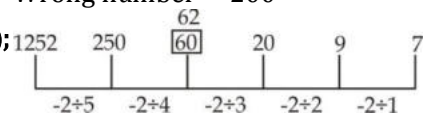
Wrong number = 246

63. (c);



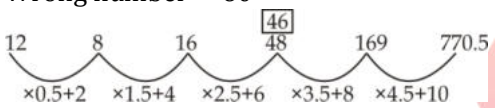
Wrong number = 200

64. (b);



Wrong number = 60

65. (c);



Wrong number = 48

66. (b); Total sale of Jute in India $= \frac{3}{5} \times 312500$
$= 187500$ Rs
Amount of Jute consumed in India
$= \frac{1}{2} \times \frac{6.25}{100} \times 200000$
$= 6250$
Price per unit of jute in India $= \frac{187500}{6250}$
$= 30$ Rs/tonnes
Price per tonne of Barey export = 15 rs/tonnes
Total barley exported
$= \frac{4}{5} \times \frac{12.5}{100} \times 200000$
$= 20000$ tonnes
Total sale barley in India
$= 500000 - 20000 \times 15$
$= 200000$ Rs

67. (b); Rice exported
$= \frac{25}{100} \times 200000 \times \frac{2}{5}$
$= 20000$ tonne
Total sale of rice exported
$= \frac{45}{100} \times 600000$
$= 270000$
Selling price of one tonne of exported rice
$= \frac{270000}{20,000}$
$= 13.5$ Rs/ tonnes
Jute consumed in India
$= \frac{1}{2} \times \frac{6.25}{100} \times 200000$
$= 6250$
Total sale of Jute in India $= \frac{60}{100} \times 312500$
$= 187500$
Per tonne price of jute consumed in India
$= \frac{187500}{6250} = 30$ Rs /tonne
Required % $= \frac{30-13.5}{30} \times 100$
$= 55\%$

68. (c); Let amount of maize consumed in India =x
$x + \frac{25}{100}x = \frac{12.5}{100} \times 200000$
$= 25000$
$\frac{125x}{100} = 25000$
x= 20000
Total sale of maize in India $= \frac{65}{100} \times 400000$
$= 260,000$
Per tonne price of maize in consumed in India
$= \frac{2,60,000}{20,000} = 13$ Rs/ tonne
Price per tonne of jute consumed in India = 30 Rs/ tonne
Required percentage
$= \frac{13}{30} \times 100$
$= 43\frac{1}{3}\%$

69. (e); Quantity of barley which is exported
$= \frac{4}{5} \times \frac{12.5}{100} \times 200000$
$= 20000$ tonne
Quantity of sugar consumed in India = 30 × 200
$= 6000$
Let total wheat produced = x
So,
Total sugar produced $= \left(100\% - \frac{250}{3}\%\right) of\ x$
$= \frac{50}{3}\%\ of\ x$
$= \frac{x}{6}$

So,

$200000 = x + \frac{x}{6} + \frac{56.25}{100} \times 200000$

$x + \frac{x}{6} = 87500$

$x = 75000$

Total sugar produced $= \frac{75000}{6}$

$= 12500$

Total sugar exported

$= 12500 - 6000 = 6500$

70. (a); Let total sugar produced is x

so total wheat produced will be 6x

percentage distribution of production of sugar and wheat $= 100\% - 56.25\% = 43.75\%$

percentage distribution of production of wheat$= \frac{43.75}{7} \times 6 = 37.5\%$

Amount of wheat exported

$= \frac{7}{15} \times \frac{3}{8} \times 200000 = 35000$

Amount of wheat consumed

$= \frac{8}{15} \times \frac{3}{8} \times 200000 = 40000$

Let, selling price of one tonne of wheat exported be Rs. $2x$ and that consumed be Rs. $3x$

Then, $35000 \times 2x + 40000 \times 3x = 5719000$

or, $190000x = 5719000$

or, $x = 30.1$

Selling price of one tonne of wheat

Exported from India = Rs. $2x$ = Rs. 2×30.1 = Rs. 60.2

71. (a); Liters of milk removed $= \frac{1}{5} \times 10 = 2$ ltr.

Liters of water removed $= \frac{1}{5} \times 2.5 = 0.5$ ltr.

$\frac{2+x}{8} = \frac{4}{1}$

$\Rightarrow x = 30$

$\frac{32}{8+y} = \frac{1}{4} \Rightarrow y = 128 - 8 = 120$ ltr.

72. (a); Let B takes 3x days to complete the job

Then A takes x days to complete the job

$3x - x = 60$

$\Rightarrow x = 30$

B takes 90 days and A takes 30 days to complete the job working alone.

let C takes y days to complete the job working alone,

then

$10\left(\frac{1}{90} + \frac{1}{y}\right) = \frac{1}{3}$

$\Rightarrow y = 45$

Let D takes z days to complete the job working alone,

$5\left(\frac{1}{30} + \frac{1}{z}\right) = \frac{1}{4}$

$\Rightarrow z = 60$

Required work in one day $= \frac{1}{30} + \frac{1}{90} + \frac{1}{45} + \frac{1}{60} = \frac{6+2+4+3}{180} = \frac{15}{180} = \frac{1}{12}$

Working together A, B, C and D will complete the work in 12 days

73. (a); Let P fills $2x$ litres a day.

then Q fills $3x$ litres a day

R fills $\frac{4}{3} \times 3x = 4x$ litres a day

And S fills $\frac{3}{2} \times 4x = 6x$ litres a day

Let total capacity of tank be $9x$ litres

Time taken by P and R to fill the tank together $= \frac{9x}{2x+4x} = \frac{3}{2}$ days

Time taken by S and Q to fill the tank together $= \frac{9x}{3x+6x} = 1$ days

Required ratio = 3 : 2

74. (b); $(10m + 15w)\ 8 = (12m + 8w)10$

$80m + 120w = 120m + 80w$

$40m = 40w$

And, m = w = 2b

$2m + 4w + 18b \rightarrow 2m + 4m + 9m \rightarrow$ 15m

$15m \times x = 25m \times 8$

$x = \frac{40}{3}$

75. (d); Let, the present ages of Raju and his son be x and y respectively.

2n years ago,

$x - 2n = 4(y - 2n)$

$x = 4y - 6n$ .....(i)

n years ago,

$x - n = 3(y - n)$

$\Rightarrow x = 3y - 2n$ .....(ii)

Solving (i) and (ii),

$y = 4n$

And, $x = 4 \times 4n - 6n = 10$n

'n' years later,

$x + n + y + n = 80$

$\Rightarrow 4n + n + 10n + n = 80$

$\Rightarrow 16n = 80$

$\Rightarrow n = 5$

Difference in their ages $= 10n - 4n = 50 - 20 = 30$

76. (c); Let speed of boat in still water = x km/hr

and speed of current is = y km/hr

so, $x = \frac{120}{100}(x - y)$

$\frac{x}{y} = \frac{6}{1}$

Let x = 6n & y = n

According to question,

$\frac{105}{7n} - \frac{\frac{200}{7}\% \times 105}{5n} = 3$

$\frac{15}{n} - \frac{6}{n} = 3$

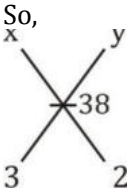
$n = \frac{9}{3} = 3$

Speed of current = 3 km/hr

77. (b); Since initial investment is in the ratio 7 : 5 : 12 means sum of investment of A and B equal C and more amount invested at the end of six months also shows that sum of investment of A and B equals to C.
So profit of C will be half of total profit
Profit of C $= \frac{10000}{2} = Rs.5000$

78. (d); Let number of chairs and table bought be 9y and 8y respectively.
And marked price of chairs and tables equal 500x and 700x
According to question
$500x \times 9y \times \frac{20}{100} + 700x \times 8y \times \frac{25}{100} = 4600$
xy = 2
Total selling price of chairs
$= \frac{80}{100} \times 500 \times 9 \times 2$
$= 7200\ Rs.$

79. (b); C.P. of mixture $= 49 \times \frac{6}{7} = 42$Rs/kg
$\frac{2}{3} = \frac{y-42}{42-x}$
84 – 2x = 3y – 126
3y + 2x = 210 ...(i)
New cost price of mixture after reverting the quantity in which they are mixed.
$\left(1+\frac{11}{38}\right) \times$ new CP = 49
$New\ CP = 49 \times \frac{38}{49}$
= 38 Rs./kg
So,



$\frac{3}{2} = \frac{y-38}{38-x}$
114 – 3x = 2y – 76
190 = 2y + 3x ...(ii)
Solving (i) and (ii)
x = 30 Rs/kg

80. (d); A, B, C and D worked for 2 days together after that A leave and B, C and D worked alternatively for 10 days starting from B
∴ B worked for 4 days, C for 3 days, and D for 3 days.
Total days A worked = 2
Total days B worked = 4 + 2 = 6
Total days C worked = 3 + 2 = 5
Total days D worked = 3 + 2 = 5
Let, their alone time to complete the work is 4x, 3x, 2x and 5x respectively.

$\therefore \frac{2}{4x} + \frac{6}{3x} + \frac{5}{2x} + \frac{5}{5x} = 1$
$\Rightarrow \frac{30+120+150+60}{60x} = 1$
$\Rightarrow x = \frac{360}{60} = 6$
'A' can complete the work in 4 × 6 = 24 days
'C' can complete the work in 2 × 6 = 12 days
$Required\ time = \frac{12 \times 24}{12+24} = \frac{12 \times 24}{36} = 8\ days$

81. (c); Let total person travelling through Delhi metro in all six days = 10x
So total person travelled through Mumbai metro in all six days = 9x
According to condition
$\frac{10x}{100} \times \frac{50}{3} - \frac{9x}{100} \times \frac{40}{3} = 70$
500x – 360x = 70 × 300
140x = 70 × 300
x = 150
Total person travelled through Delhi metro in all six days = 1500
Total person travelled through Mumbai metro in all six days = 1350
Total fare of Delhi metro on Saturday
$= \frac{35}{300} \times 1500 \times 18 = Rs.3150$
Total fare of Mumbai metro on Saturday
$= \frac{5}{27} \times 1350 \times 20 = Rs.5000$
Required difference = 1850

82. (e); $\frac{\frac{35}{300} \times 1500 - x}{\frac{5}{27} \times 1350 - x} = \frac{2}{3}$
$\frac{175-x}{250-x} = \frac{2}{3}$
525 – 3x = 500 – 2x
x = 25

83. (a); Total people travelling in Delhi metro on Wednesday and Thursday together
$= \frac{10x}{100} \times \left(\frac{50}{3} + \frac{50}{3}\right)$
$= \frac{10x}{3}$
Total people travelling in Mumbai metro on Monday and Saturday together
$= \frac{9x}{100} \times \left(\frac{200}{9} + \frac{500}{27}\right)$
$= \frac{11x}{3}$
Required percentage
$= \frac{\frac{10x}{3}}{\frac{11x}{3}} \times 100$
$= \frac{1000}{11}\%$
$= 90\frac{10}{11}\%$

84. (c); $20 \times 15 \times 10x + \frac{100}{9} \times 13.5 \times 9x = 4350$

$3000x + 1350x = 4350$

$4350x = 4350$

$x = 1$

∴ Required percentage

$= \frac{15 \times \frac{70}{3} \times 10 - 13.5 \times \frac{500}{27} \times 9}{13.5 \times \frac{500}{27} \times 9} \times 100$

$= \frac{3500 - 2250}{2250} \times 100$

$= \frac{1250}{2250} \times 100$

$= \frac{500}{9}\% = 55\frac{5}{9}\%$

Alternate Method

Person travelled on Delhi metro on Monday

$= 1500 \times \frac{70}{300} = 350$

Person travelled on Mumbai metro on Saturday

$= 1350 \times \frac{500}{2700} = 250$

Let fare per person of Delhi metro and Mumbai metro be 10x and 9x respectively

Required percentage

$= \frac{350 \times 10x - 250 \times 9x}{250 \times 9x} \times 100$

$= \frac{1250x}{2250x} \times 100 = 55\frac{5}{9}\%$

85. (d); Total person travelled by both metro on Sunday

$= \frac{120}{100} \times 15 \times \frac{35}{3} + \frac{130}{100} \times 13.5 \times \frac{500}{27}$

$= 210 + 325 = 535$

Total people travelled by both metro on Monday

$= 15 \times \frac{70}{3} + 13.5 \times \frac{200}{9}$

$= 350 + 300 = 650$

Required percentage

$= \frac{535}{650} \times 100 = 82\frac{4}{13}\%$

86. (b); Total students in Orissa who attend school = 2000×4000

$= 8000000$

$= 80$ lakh

Total students in Karnataka who attend school = 2500×2400

$= 60$ lakh

Required number of girls

$= \frac{1}{2} \times 80 + \frac{1}{3} \times 60 = 60$ lakh

87. (a); Total girls in west Bengal who attend school = $\frac{3}{8} \times 48$ L

$= 18$ Lakh

Total students in UP who attend school = 4000×1400

$= 56$ Lakh

Total boys in UP who attend school= $\frac{325}{7}\%$ of 56

$= \frac{325}{100 \times 7} \times 56$

$= 26$ Lakh

Required percentage $= \frac{18}{26} \times 100$

$= \frac{9}{13} \times 100$

$= \frac{900}{13}\%$

$= 69\frac{3}{13}\%$

88. (e); Number of students per school who attend school in West Bengal

$= \frac{4800000}{960}$

$= 5000$

Total students in Karnataka who attend school

$= \frac{5}{4} \times 48$

$= 60$ lakh

Let new number of schools = x

So, $\frac{60,00000}{x} = 5000$

$x = 1200$

Required percentage $= \frac{2400 - 1200}{2400} \times 100$

$= 50\%$

89. (c); $\frac{500}{9}\% \rightarrow 40$L

$100\% \Rightarrow \frac{40 \times 9}{500} \times 100$

$\Rightarrow 72$L

Total schools in Bihar $= \frac{7200000}{4000}$

$= 1800$

Required average

$= \frac{960 + 1400 + 2000 + 1800 + 2400}{5}$

$= 1712$

90. (b); Students per school in West Bengal who attend school $= \frac{4800000}{960}$

$= 5000$

Students per school in UP who attend school= $\frac{5000}{10} \times 8$

$= 4000$

Students per school in Orissa who attend school= $\frac{5000}{10} \times 8$

$= 4000$

Students per school in Karnataka $= \frac{5000}{10} \times 5 = 2500$

Total students from all states

$= (48 + 56 + 80 + 72 + 60)$ L

$= 316$ L

ENGLISH LANGUAGE

91. (b); Because previous attempts at focused banking such as the setting up of the RRBs have shown limited success.

92. (d); The number of both rural and metropolitan branches of RRBs has increased over the years.

93. (e); All (a), (b) and (c)

94. (a); All are correct.

95. (a); General mindset towards women in general and poor women in particular needs to be changed.

96. (c); Refer 4th paragraph 1st sentence "In order to……..distinct cultural identities."

97. (d); Statement (1) is correct because according to the 1st line of the passage the working group on minorities held their session at Geneva in May 2002.
Statement 3 is correct. Refer 1st line of the paragraph, "Integrating diversity……human rights law".

98. (b); Refer 4th paragraph point (b) stating "allowing minorities ……decision making process"

99. (a); According to the passage Minorities have been subjected to social discrimination as it suggests that the state should protect the rights of all within their jurisdiction without the distinction of any kind.

100. (a); Refer 2nd paragraph 2nd line, " This required ……..any kind"

101. (a); Replace 'poor' with 'poorer'

102. (d); Use 'should' in place of 'would' because after 'lest', 'should' is used.

103. (b); 'then' should not be used here because after 'as soon as' or 'as long as', than/then is not used.

104. (a); Replace 'among' with 'between'

105. (c); Use 'when' or 'before' in place of 'then'

106. (a); **Polyphony** means the style of simultaneously combining a number of parts, each forming an individual melody and harmonizing with each other. **Cacophony** means a harsh discordant mixture of sounds. As both are opposite in meanings, it makes the sentence perfectly meaningful.
Consonance means agreement or compatibility between opinions or actions.
Jangle means a ringing metallic sound.

107. (c); **Bargaining** means negotiate the terms and conditions of a transaction. **Imperatives** mean directive, instruction. Hence "bargaining, imperatives" is the correct set of words to fill the spaces meaningfully.

Reversal means a change to an opposite direction, position, or course of action.
Integrity means the quality of being honest and having strong moral principles.

108. (d); "shift, adopt" is the correct set of words which fill the blanks meaningfully. "a shift in behavior" forms a better and meaningful phrase than any other words given in the options.
Shun means persistently avoid, ignore, or reject (someone or something) through antipathy or caution.

109. (b); "maps, potential" is the correct set of words which fit into the sentence meaningfully. **Maps** means represent (an area) on a map; make a map of. **Potential** means latent qualities or abilities that may be developed and lead to future success or usefulness. It is to be noted that in this case, the word "maps" is used as a verb and the word "potential" is used as a noun. Hence among the given options, only this set of words find the most suitable fillers.
Dormant means having normal physical functions suspended or slowed down for a period of time; in or as if in a deep sleep.

110. (e); "trafficking, illicit" is the correct set of words to make the sentence meaningful. **Trafficking** means dealing or trading in something illegal. **Illicit** means forbidden by law, rules, or custom.
Covert means not openly acknowledged or displayed.

111. (b); 'Perception' is 'the way something is viewed as'.

112. (a); **113. (d);**

114. (a); Out of these adjectives, great, trivial and negligible, the last two have negative meanings which is not desirable here. Hence, option (a).

115. (c); Here, a negative meaning work is required.

116. (d);

117. (e);

118. (a); "Lacking full engagement, which means total investment of one's energy in an assigned job, we are losing the sense of direction and the notion of propriety." summarizes the paragraph in one sentence.

119. (c); "Great management which tends to develop people and manage effectively is rather difficult to imbibe even by observation." is the correct summary.

120. (d); "The three critical inputs – food, water and energy resources – are so balanced optimally that any disruption in this even through small climatic changes is bound to create havoc sooner than later." captures the essence of the paragraph.

ENGLISH LANGUAGE

Directions (1-6): Read the following passage and answer the given questions. Some words are highlighted to help you answer the questions.

Technology is growing by leaps and bounds. Innovation and disruption have become everyday phenomena. A technology **driven** organization is a company whose business model, innovation strategy, and growth are technology-centric. Advancements in technology not only help industries to function at a faster pace, but they also help to minimize human effort and increase the efficiency of production. At the same time, technology is also becoming an increasing factor for increasing unemployment.

Technology is **__(I)__** to a variety of avenues of new scientific discoveries and developments. Some of these developments are artificial intelligence, 3D printing, self-driven vehicles, and robotics. As a result, technology has started creating employment for skilled professionals. Also, considering automation in agriculture and manufacturing. This has opened opportunities for people who can drive machines and even for companies which work on automation technology. Along with the growth of jobs in the automation sector, dependent industries start growing. For example, with increasing automation in manufacturing, research and development in supply chain and logistics grows. Hence, technology has been a boon considering the number of jobs it continues to create. Given the fact that these developments in technology are endless, employment opportunities too will see an ever-increasing graph, more so in talent-rich countries such as India and China. However, the immediate result of technological advancements is observed as losses in employment. This is because, with the growth in technology, more and more manual tasks are replaced by machines. This makes more and more jobs redundant as machines guarantee efficiency as well as are a cost-effective alternative to human employees. This forces people to continuously update themselves and hence leads to survival of the fittest. This can be hard on an unskilled workforce which has no access to skill development training or to education.

Although some of the studies are close when it comes to predictions up to 2020-2021, jumping ahead a decade the numbers become incomprehensibly bigger. To think that only 1.8 million jobs will go within the next two years, and ten years later that figure increases by half a million or more, is difficult to accept. But, change is coming, and as the technology becomes more prevalent and embedded within different sectors of the economy, it could be far reaching and rapid.

The 2017 McKinsey study also assesses degrees of automation and revealed a now well documented statistic. 60% of occupations have at least 30% of constituent work activities that can be automated. It further states that although half of all jobs have the technical potential to become automated based on currently available technologies, due to social, economic and technical factors, the rate of adoption will be varied and slow. However, over 200 million global workers will need to switch occupational categories by 2030 and most likely re-train because of role changes.

The intervention of technology in any domain has become absolutely inevitable. The wonders of technology are such that it has not just boosted productivity and efficiency, but also the level of safety which would have been unachievable by humans alone. Faster communication, rapid transactions, global reach are all by-products of growth in technology. However, most policymakers are neither keyed in nor in pace, and we could be **frittering** away these growth opportunities as a result. We can, therefore, conclude by saying that although technology in terms of automation has reduced jobs for unskilled people, it has outgrown the growth in employment in other areas. This can be dealt with a shift of people from unskilled to specially-skilled employees. This change will further enhance the growth of people, their employability, their pay scales, basic income and purchasing power of people, leading the world to development alone.

1. Which of the following sentence (s) is/are true according to the context of the passage?

(i) Technology and automation have compressed the opportunities for dependent industries.

(ii) Technical advancement is forcing people to continuously update their knowledge to sustain in the job market

(iii) Even though some jobs will become redundant, technological advancement has the potential to create many more employment opportunities.

(a) Only (i)
(b) Both (i) and (ii)
(c) Only (iii)
(d) Both (ii) and (iii)
(e) All of these

2. Which of the following statement provides an appropriate premise of the given passage?
(a) Technological innovations result in the improved lifestyles, and hence consumerism increases and thereby results in more employment opportunities.
(b) Harnessing technological change for the good also requires vigilance to prevent new technology being used to emancipate workforce.
(c) Highly-paid workers are more commonly affected, but the effects are more severe for less well-paid workers.
(d) Machines have gained an upper hand in its war with humans.
(e) None of these

3. Which of the following statement(s) is/are false with regards to the context of the passage?
(i) 60% of occupations have at least 30% of constituent work activities that can be automated
(ii) The rate of technology adoption of most of the jobs will be varied and slow
(iii) Half a million global workers will need to switch to occupational categories by 2030.
(a) Only (i)
(b) Both (i) and (ii)
(c) Only (iii)
(d) Both (ii) and (iii)
(e) All of these

4. Which of the following is synonym of the word **DRIVEN** highlighted in the passage?
(a) operated (b) mobilized (c) Voluntary
(d) researched (e) developing

5. Which of the following is synonym of the word **FRITTERING** highlighted in the passage?
(a) organize (b) squander (c) influence
(d) accomplish (e) accumulate

6. Choose the most suitable word/phrase to fill the given blank **(I).**
(a) enhancing (b) giving birth (c) motivating
(d) growing risks (e) gathering

Directions: (7-9): An idiom has been given in each question and has been used in the sentences given below. Identify the statements where the idiom has been used in a contextually and grammatically correct manner.

7. Eye to eye
(i) I'm glad that we see **eye to eye** on the project's details
(ii) It was the end of term and the children were getting a little **eye to eye**.
(iii) My sisters don't see **eye to eye** with me about the arrangements.
(a) Only (i)
(b) Both (i) and (iii)
(c) Only (iii)
(d) Both (ii) and (iii)
(e) All of these

8. a stone's throw
(i) This article about the current problems of the nation is right **a stone's throw.**
(ii) We need someone who's really **a stone's throw** to answer questions from the press.
(iii) The apartment is just **a stone's throw** from the sea.
(a) Only (i)
(b) Both (i) and (iii)
(c) Only (iii)
(d) Both (ii) and (iii)
(e) All of these

9. Bite the bullet
(i) I hate going to the dentist, but I'll just have to **bite the bullet.**
(ii) I decided I had to **bite the bullet** and take a couple of math classes even though I knew they were hard.
(iii) I don't actually enjoy cleaning, but I **bite the bullet** and do it so that everything in my house isn't covered in a thick layer of dust.
(a) Only (i)
(b) Both (i) and (iii)
(c) Only (iii)
(d) Both (ii) and (iii)
(e) All of these

Directions (10-14): In the following questions, a sentence is divided into four parts. Choose the part of the sentence which may contain a grammatical error in it. If all the parts of the sentence are grammatically correct and contextually meaningful, choose option (e) i.e., "no error" as your answer choice.

10. It is not the (a)/ faculty members (b)/ but the president (c)/ who decide this issue. (d)/ No error. (e)

11. Either the (a)/ man or his wife (b)/ know the (c)/ truth of the matter. (d)/ No error (e)

12. They don't seem (a)/ to be able to find (b)/ a solution too the problem(c)/ of global warming yet. (d)/ No error (e)

13. No sooner (a)/ the company had(b)/ launched its new product (c)/ than it went bankrupt.(d)/ No error (e)

14. I read (a)/ at least 100 books(b)/ by the time (c)/ I was twelve. (d)/ No error. (e)

Directions (15-18): Each of the following questions has two sentences. Each sentence has a blank. From the options given below the sentence, pick the word which fits into both the blanks and mark the letter corresponding to it as your answer.

15. (I) He currently _____ the position of technical manager.
(II) I hope the repair _____ until we get the car to a garage.
(a) had (b) requires (c) holds
(d) accepts (e) provides

16. (I) All living organisms have to _____ to changes in environmental conditions.
(II) The scriptwriter helped him to _____ his novel for the screen.
(a) adapt (b) adept (c) adopt
(d) adequate (e) addresses

17. (I) She _____ the conclusion that there was no more she could do.
(II) The child _____ down and picked up the kitten.
(a) resembled (b) hovered (c) made
(d) recognized (e) reached

18. (I) New business opportunities will _____ with advances in technology.
(II) The economy has started to _____ from recession.
(a) appear (b) emerge (c) disclose
(d) eliminate (e) influence

Directions (19-23): Rearrange the following six sentences (A), (B), (C), (D), (E) and (F) in the proper sequence to form a meaningful paragraph and then answer the questions given below.
(a) In Diener's words, it's more like "a moving baseline" than one set point over a lifetime.
(b) Happy people have strong social relationships. In one study conducted by Diener, the happiest 10 percent of the participants all had strong supportive relationships.
(c) A strong social network didn't guarantee happiness, but it was a requirement to be in the happiest group.
(d) Diener discussed the set point theory of temperament, which states that people have ups and downs in reaction to life events, but that they adapt and return to a set point.
(e) Temperament, which appears to have a genetic component according to several recent studies, also affects mood.
(F) There is evidence for this, but studies have shown that people who have experienced a major loss, like being fired or losing a spouse, often don't fully adapt or take years to do so.

19. What should be the FOURTH sentence after rearrangement?
(a) F (b) A (c) B
(d) C (e) D

20. What should be the THIRD sentence after rearrangement?
(a) E (b) C (c) A
(d) B (e) F

21. What should be the LAST sentence after rearrangement?
(a) F (b) C (c) B
(d) A (e) D

22. What should be the SECOND sentence after rearrangement?
(a) F (b) B (c) C
(d) D (e) E

23. What should be the FIRST sentence after rearrangement?
(a) F (b) D (c) E
(d) B (e) C

Directions (24-26): In each of the questions given below four words are given in bold. These words may or may not be in their correct position. Following each sentence four sequences are provided. Select the sequence of the words which will make the given sentence contextually meaningful. If the words are correct at their current position then choose 'no rearrangement required' as your answer.

24. Drone **vital(A)** is playing a **technology(B)** role in delivering food and other **activities(C)** alongside relief **essentials(D).**
(a) BADC (b) ADCB (c) CDBA
(d) BACD (e) No rearrangement required

25. Individual (A) of speech and expression **pedestal (B)**to media is not on a higher **freedom (C)** than the rights of **available (D)** citizens.
(a) BADC
(b) ADCB
(c) No rearrangement required
(d) BACD
(e) CDBA

26. Schools that **provide (A)** pick and drop services to **students (B)** have been asked to **ensure (C)** that the service **providers (D)** always have their masks on.
(a) BADC
(b) ADCB
(c) No rearrangement required
(d) BACD
(e) CDBA

Directions (27-30): Which of the phrase/ word from the options (a), (b), (c) and (d) given below each sentence should replace the phrase printed in bold letters to make the sentence grammatically correct? If the sentence is correct as it is, mark (e) i.e., "No correction required" as the answer.

27. **Not only would you be learning** grammar, but you'll also put it into practice.
(a) Not only will you learn
(b) Not only you will learnt
(c) You will be learning
(d) Not only you will be learning
(e) No replacement required

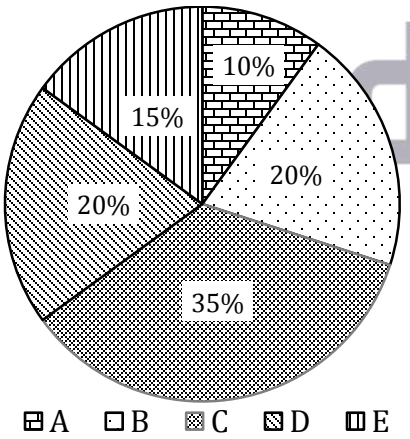
28. If you notice any faulty office equipment or hazards, please report them to your supervisor **whom will notify the management.**
(a) which will notify the management
(b) whom would notify the management
(c) who will notify the management
(d) they will notify the management
(e) Not replacement required

29. The water **had been running** for five minutes before she turned it off.
(a) have been running
(b) is running
(c) had run
(d) was running
(e) No replacement required

30. We are looking forward to the movie, **have saw the trailer last week**.
(a) with saw the trailer last week
(b) having seeing the trailer last week
(c) while seeing the trailer last week
(d) having seen the trailer last week
(e) No replacement required

QUANTITATIVE APTITUDE

Direction (31 – 36): Given below pie chart shows percentage distribution of total orders of ice cream purchased by five different shops and table shows percentage of orders of ice cream sold by these five shops. Read the data carefully and answer the questions.
Total orders of ice cream purchased by all shops together = 400



Shops	Percentage of order of ice cream sold out of total order purchased
A	60%
B	75%
C	80%
D	95%
E	90%

31. Total unsold order of ice cream by shop E is what percent more than total unsold order of ice cream by shop D?
(a) 30% (b) 50% (c) 40%
(d) 20% (e) 60%

32. Out of total order of ice cream sold by shop B, 25% are chocolate, 15% are vanilla and rest are strawberry. If $33\frac{1}{3}$% & 75% of total order of chocolate and vanilla were sold, then find the total orders of strawberry purchased by B?
(a) 19 (b) 27 (c) 29
(d) 23 (e) 21

33. The cost price of each order purchased by shop D is Rs. 200. If shop D sold 25% order at Rs. 175 each and rest at Rs. 250 each. Find the overall profit (approximate) of shop D?
(a) 25% (b) 5% (c) 15%
(d) 10% (e) 20%

34. Find average number of unsold orders of ice cream for A, B & E?
(a) 14 (b) 12 (c) 16
(d) 18 (e) 22

35. If total orders of ice cream purchased by shop X is 25% more than that of B and total unsold orders of ice cream by shop X is equal to difference between total unsold orders of ice cream by shop C & D, then find total sold orders of ice cream by shop X?
(a) 76 (b) 78 (c) 72
(d) 70 (e) 64

36. Find the central angle for total orders of ice cream purchased by C?
(a) 96° (b) 102° (c) 112°
(d) 108° (e) 126°

37. A vessel contain mixture of milk and water in the ratio of 6 : 1 respectively. If 21 liters mixture taken out and replaced with 77 liters of milk, then the resultant mixture becomes twice of the initial mixture. Find the quantity of the initial mixture?
(a) 56 liters (b) 42 liters (c) 84 liters
(d) 35 liters (e) 91 liters

38. Length and speed of train A is 'L' meters and 108 km/hr. It crosses a platform; whose length is 60% less than the length of train A in 28 sec. If train B crosses the same platform in 24 sec running at the speed of 90 km/hr., then find the time taken by train A to cross train B running in same direction?
(a) 172 sec (b) 198 sec (c) 196 sec
(d) 184 sec (e) 192 sec

39. A can complete 45% of a work in $11\frac{1}{4}$ days and B can do 30% of same work in 3 days. If A, B & C can do the same work in $6\frac{1}{4}$ days, then find that C is how much percent less efficient than A?
(a) 60% (b) 50% (c) 40%
(d) 54% (e) 72%

40. Six years ago, the ratio of age of Kunal to Sagar was 6 : 5 and four years hence ratio of age of Kunal to Sagar will be 11 : 10. Find the present age of Sagar?
(a) 15 years (b) 16 years (c) 14 years
(d) 10 years (e) 12 years

41. A and B entered into business my making investment of Rs. 2400 and 2800 respectively. After six months A left the business and after four more months C joined the business with capital 20% more than A's investment. If at the end of year sum of profit share of A and C is Rs. 4200, then find total profit?
(a) 10200 Rs. (b) 11200 Rs. (c) 11600 Rs.
(d) 11800 Rs. (e) 10800 Rs.

42. A man borrowed Rs. Rs.12000 on compound interest at the rate of 20% per annum and at the end of first year man again borrowed Rs. 'X' more on compound interest at the same rate of interest. If at the end of second year, man paid total amount of Rs.20400, then find value of 'X'?
(a) Rs.2400 (b) Rs.2000 (c) Rs.3600
(d) Rs.2600 (e) Rs.4000

Direction (43 – 48): In each question two equations numbered (I) and (II) are given. You should solve both the equations and mark appropriate answer.
(a) If x=y or no relation can be established
(b) If x>y
(c) If x<y
(d) If x≥y
(e) If x≤y

43. I. $x^2 = 256$ **II.** $y^2 - 17y + 16 = 0$

44. I. $x^2 + 20x + 100 = 0$ **II.** $y^2 + 13y + 30 = 0$

45. I. $4x^2 - 8x - 5 = 0$ **II.** $2y^2 - 11y + 14 = 0$

46. I. $6x^2 + 5x + 1 = 0$ **II.** $20y^2 + 9y + 1 = 0$

47. I. $2x^2 - 9x + 9 = 0$ **II.** $6y^2 - 17y + 12 = 0$

48. I. $4x^2 - 17x + 15 = 0$ **II.** $2y^2 - 17y + 35 = 0$

49. 'A' invested Rs. X in a scheme on simple interest at the rate of 20% p.a. for two years and 'B' invested Rs. Y in same scheme. If interest got by A is Rs. 480 more than that of B after two years. If X is 25% more than Y, then find value sum of amount invested by A & B?
(a) 11400 Rs. (b) 10800 Rs. (c) 10200 Rs.
(d) 10400 Rs. (e) 11800 Rs.

50. A shopkeeper marked the price of jeans 25% above the cost price and allowed two successive discounts of 10% and 5% respectively. If shopkeeper made a profit of Rs. 89.1, then find at what price shopkeeper sold the jeans to make a profit of 40%?
(a) 1844.4 Rs. (b) 1814.4 Rs. (c) 1860.4 Rs.
(d) 1890.4 Rs. (e) 1880.4 Rs.

51. A box contains 12 red, 6 green and 'x' yellow balls. Probability of choosing one green ball out of the box is $\frac{2}{9}$, then find the probability of choosing one ball which can be either red or yellow?
(a) $\frac{4}{9}$ (b) $\frac{5}{9}$ (c) $\frac{2}{3}$
(d) $\frac{7}{9}$ (e) $\frac{8}{9}$

52. When digits of the two digits number are reversed, number obtained is 9 less than twice of the original number. Also, the new number obtained is 175% of the original number. Find the sum of the digits of the number?
(a) 13 (b) 10 (c) 9
(d) 12 (e) 15

53. The time take by a boat in upstream is double than the time taken by it in downstream, but distance covered by it in upstream is only 75% of distance covered by it in downstream. Find the ratio of speed of boat in still water to speed of current.
(a) 5 : 11 (b) 11 : 7 (c) 7 : 11
(d) 11 : 3 (e) 11: 5

Direction (54 – 59): Given below table shows number of seats available in five different buses and percentage of seats booked in these buses out of total available seats. Read the data carefully and answer the questions.

Buses	Total seats available	Percentage of seats booked, out of total available seats
A	20	60%
B	24	75%
C	15	60%
D	NA	80%
E	NA	62.5%

Note – Total seats available in any bus = Booked seats + Vacant seats
(ii) Total seats available in bus D & E together is 65.
(ii) Total vacant seats in all five buses are 40.

54. If total vacant seats in bus C is 60% less than that of in bus E, then find number of vacant seats in D?
(a) 6 (b) 5 (c) 4
(d) 7 (e) 3

55. Find ratio of total vacant seats in bus B to total booked seats in bus A?
(a) 1 : 3 (b) 1 : 2 (c) 2 : 3
(d) 3 : 4 (e) 1 : 1

56. Vacant seats in bus C are what percent less than vacant seats in bus A?
(a) 15% (b) 20% (c) 30%
(d) 25% (e) 36%

57. What percent of seats remained vacant in bus A, C & D, if ratio of total seats booked in bus B to bus E is 18 : 25?
(a) 30% (b) $33\frac{2}{3}\%$ (c) $31\frac{2}{3}\%$
(d) $33\frac{1}{3}\%$ (e) None of these

58. If difference between total vacant seats in bus D and E is 10, then find ratio of booked seats in D to E?
(a) 4 : 3 (b) 4 : 5 (c) 4 : 7
(d) 3 : 5 (e) 3 : 4

59. Find average number of booked seats in bus A, B & C?
(a) 13 (b) 8 (c) 9
(d) 11 (e) 7

Direction (60 – 65): What approximate value should come in the place of question mark in following question.

60. $379.98 + (7.99)^2 - ? + 901.03 = 969.93$
(a) 380 (b) 385 (c) 365
(d) 345 (e) 375

61. $(89.99\% \text{ of } 7000.02 + (24.01)^2) \div ? = 1719.01$
(a) 4 (b) 3 (c) 2
(d) 6 (e) 5

62. $32.01 \times 4.99 + ? = 64.03\% \text{ of } 349.97$
(a) 48 (b) 96 (c) 72
(d) 64 (e) 32

63. $\frac{312.07}{?} + (12.99)^2 = 20.01\% \text{ of } 909.99$
(a) None of these (b) 48 (c) 6
(d) 12 (e) 24

64. $199.99 + 12.01\% \text{ of } 499.99 - \sqrt[3]{63.99} = ?^2$
(a) 12 (b) 16 (c) 14
(d) 18 (e) 8

65. $\frac{84.01}{?} + 26.03\% \text{ of } 799.97 + \sqrt[4]{16.03} = (5.99)^3$
(a) 42 (b) 21 (c) 12
(d) 14 (e) 4

REASONING ABILITY

66. In the given number "**729645138**" if all the even digits are added by 1 and all the odd digits are subtracted by 1. What is the resultant when third and sixth digits from the left end are multiplied?
(a) 24 (b) 18 (c) 25
(d) 36 (e) 32

Directions (67-71): Study the information carefully and answer the questions given below.

Nine persons J, K, L, M, N, O, P, Q and R are working in three different department – IT, HR and Production but not necessarily in the same order. At least two persons are working in the same department but not more than four. L works with Q but not in IT. P does not work in HR. Both K and R work in same department but not work with both P and J. M work only with O but not in IT. J work with N. O does not work in production.

67. Who among the following work with Q except L?
(a) P (b) K (c) N
(d) R (e) Both (b) and (d)

68. How many persons work in HR?
(a) Two (b) One (c) Four
(d) Three (e) Can't be determined

69. In which of the following department R works?
(a) IT (b) HR or IT (c) Production
(d) HR (e) IT or Production

70. Four of the following five are alike in a certain way and so form a group. Find the one who does not belong to that group?
(a) P-N (b) J-K (c) L-K
(d) Q-R-L (e) M-O

71. Which of the following pair/group of persons work in IT?
(a) P-J (b) P-K (c) R-J
(d) N-R (e) K-N

Directions (72-76): Study the information carefully and answer the questions given below.

Six persons take lecture on different topics i.e., Coffee, Tea, Cold Drink, Juice, Diaper and Baby lotion in different months of a same year i.e., January, May, June, July, September and December but not necessarily in the same order.

D takes lecture on Baby lotion in the month which has 30 days. E takes lecture on Tea but not just before A. A takes lecture in the month which has even number of days. Two persons take lecture between D and the one who take lecture of Juice. There are as many persons take lecture before A same as the number of persons take lecture after the one who takes lecture on Coffee. C takes lecture just before of the one who takes lecture on Diaper. B neither take lecture on Coffee nor juice. F does not take lecture on cold drink. E does not take lecture after D.

72. Which of the following statement is true?
(a) C takes lecture before E
(b) F takes lecture on Coffee
(c) B takes lecture in January
(d) C does not take lecture on Juice
(e) None is true

73. The number of persons take lecture after C is same as number of persons take lecture between ___ and ___?
(a) E and the one who take lecture on Cold drink
(b) C and D
(c) The one who take lecture on Baby lotion and F
(d) Both (a) and (c)
(e) None of these

74. Who among the following take lecture in May?
(a) F (b) E (c) B
(d) C (e) None of these

75. Four of the following five are alike in a certain way and so form a group. Find the one who does not belong to that group?
(a) D (b) B (c) F
(d) E (e) C

76. Who among the following take lecture just before B?
(a) The one who take lecture on Baby lotion
(b) E
(c) D
(d) Both (a) and (c)
(e) None of these

77. If it is possible to make meaningful word with the 1st, 3rd ,9th and 11th letters of the word **'AGGREGATION'** which would be the third letter of the word from the left? If more than one such meaningful word can be formed give 'Y' as the answer. If no such meaningful word can be formed, give 'Z' as your answer.
(a) Y (b) A (c) I
(d) Z (e) N

Directions (78-81): Study the information carefully and answer the questions given below.

Eight persons A, B, C, D, E, F, G and H are sitting around a square table in such a way that four persons sit on each of the four corner of the table and other four persons sit on the middle of each side. The one who sits at the corner of table faces towards the center of table and the one who sits at the middle side of table faces outside the center of table.

B sits at one of the middle sides. One person sits between B and E. F sits immediate left of E. Three persons sit between A and F. H sits second left of C. D is not an immediate neighbour of B.
G and C are not an immediate neighbour to each other.

78. How many persons sit between A and H when counted from right of A?
(a) One (b) Three (c) Six
(d) Five (e) Two

79. Who sits immediate left of D?
(a) C (b) H (c) B
(d) E (e) A

80. Four of the following are alike in a certain way, find the one which is different from all?
(a) D (b) F (c) C
(d) G (e) A

81. Which of the following pairs face outside the centre?
(a) D, F (b) A, B (c) F, E
(d) H, E (e) G, B

Directions (82-85): In each question below are given three statements followed by two conclusions numbered I and II. You have to take the given statements to be true even if they seem to be at variance with commonly known facts and then decide which of the given conclusions logically follows from the given statements, disregarding commonly known facts.
Give answer:
(a) If only conclusion I follows.
(b) If only conclusion II follows.
(c) If either conclusion I or II follows.
(d) If neither conclusion I nor II follows.
(e) If both conclusions I and II follow.

82. Only points are draw. Only a few points are pins. Some pins are toys.
I. All Pins are Points. II. No toys are Point.

83. Only pennies are coins. Some gems are pennis. Only pennies are dollar.
I. Some Pennies are not Gems.
II. All coins being gems is a possibility.

84. All caps are bullet. No pill is cap. No bullet is gun.
I. Some caps being gun is a possibility
II. Some bullets are not pill.

85. Only gloves are socks. No gloves are foot. Only gloves are stands.
I. No socks are foot. II. Some gloves are not foot.

86. In the word '**HANDCRAFT**', how many pairs of the letters have the same number of letters between them in both forward and backward direction in the word as in alphabetical series?
(a) One (b) Three (c) Two
(d) More than three (e) None

Directions (87-89): Study the information carefully and answer the questions given below.

A certain number of persons sitting in a straight line facing towards the north direction. Three persons sit between A and G. Five persons sit between G and T. As many persons sit between A and T as between A and H. T is third from one of the extreme ends. J is second from the left end. D sits second to the right of J. D sits 2nd to the left of H. J and T are not an immediate neighbour to each other.

87. If X sits fifth to the right of H, then how many persons sit between X and A?
(a) Two (b) Five (c) Three
(d) Four (e) Seven

88. What is the total number of persons sitting in a straight line?
(a) 28 (b) 14 (c) 17
(d) 25 (e) 32

89. How many persons sit between J and H?
(a) Five (b) Three (c) Four
(d) Six (e) None

Direction (90-93): Study the following information carefully and answer the questions given below:

Eight persons were born in four different months- February, April, August and October Either 13th or 24th but not necessarily in the same order. R was born on even date in the month which has 31 days. More than three persons were born between D and R. The number of persons were born before D is same as the number of persons were born after H. No one was born between R and M. Both S and B were born on same date but before August. Not more than two persons were born between P and Q.
S was born before Q but not just before.

90. Which of the following is true?
I. Three persons were between S and R
II. M was born in the month which has 30 days
III. D was born just before S
(a) Only II (b) Both I and III (c) Only I
(d) Both II and III (e) None is true

91. How many persons were born before the one who was born just after P?
(a) As many persons were born between H and B
(b) Two
(c) As same the number of persons born after R
(d) Five
(e) None of these

92. How many persons were born between Q and D?
(a) 4 (b) 2 (c) 1
(d) 3 (e) 5

93. Four of the following five are alike in a certain way and so form a group. Find the one who does not belong to that group?
(a) D (b) Q (c) M
(d) P (e) H

94. In the given word "CARBONIZE" if vowel is replaced with its next letter and consonant is replaced with its previous letter then how many letters repeated?
(a) Two (b) One (c) Three
(d) More than three (e) None

Direction (95-96): Study the following information carefully and answer the questions given below:

Seven family members are living in a family. A and C are only sisters of B. H is the father of B. M is married to H. B is married to V. V has no siblings. R is paternal grandfather of B. M has only three children. V is not a son in law of M.

95. How many females are living in the family?
(a) Two (b) Four (c) More than four
(d) Three (e) None of these

96. How is M related to R?
(a) Daughter (b) Mother-in-law
(c) Daughter in law (d) Mother (e) Wife

Direction (97-100): Study the following information carefully and answer the questions given below:

Six jar A, B, C, D, E and F are filled with different quantity of water in litre in integer numbers. The jar filled with 15 litre of water is just more water to jar E. The Jar with maximum quantity has 33 litres of water. Jar D has more water to jar B but not more as jar C. Jar F has more water to jar E but not more as jar A, which has less quantity of water to jar D. Jar B has more quantity of water than the jar filled with 15 litres of water.
Volume of water is calculated in litre.

97. How many jars have fewer water to jar A?
(a) One (b) Two (c) Four
(d) Three (e) Can't be determined

98. If jar D has twice quantity to Jar F then, what is exact quantity of water in jar D?
(a) 66 litres (b) 22 litres (c) 13 litres
(d) 30 litres (e) 25 litres

99. If box A has 16 litres of water then, what may be the possible quantity of water in jar D?
(a) 25 litres (b) 9 litres (c) 12 litres
(d) 35 litres (e) 16 litres

100. If jar B has 10 litres more water to jar F then, what is the sum of the quantity of water in Jar B and Jar C?
(a) 57 litres (b) 56 litres (c) 51 litres
(d) 47 litres (e) None of these

Solutions

ENGLISH LANGUAGE

1. (d): For sentence (i), refer to 6th sentence of the second paragraph "For example, with increasing automation in manufacturing, research and development in supply chain and logistics grows." Hence statement (i) is incorrect.
For sentence (ii), refer to the last 4th sentence of the 2nd paragraph "This makes more and more jobs redundant as machines guarantee efficiency as well as are a cost-effective alternative to human employees. This forces people to continuously update themselves and hence leads to survival of the fittest."
For sentence (iii), refer to the 8th sentence of the 2nd paragraph "Given the fact that these developments in technology are endless, employment opportunities too will see an ever-increasing graph, more so in talent-rich countries such as India and China. However, the immediate result of technological advancements is observed as losses in employment."
Reading thoroughly the 2nd paragraph, we can conclude that only statements (ii) and (iii) are correct.

2. (b): The most suitable answer is option (b). To validate this, refer to the 5th sentence of the last paragraph "We can, therefore, conclude by saying that although technology in terms of automation has reduced jobs for unskilled people, it has outgrown the growth in employment in other areas."

3. (c): Among the given statements, statement (iii) is incorrect.
Refer to the last sentence of the 3rd paragraph "However, over 200 million global workers will need to switch occupational categories by 2030 and most likely re-train because of role changes."

4. (a): Driven means moved, operated, or controlled by something.
Operated means control the functioning of (a machine, process, or system).

5. (b): Frittering means to waste money, time, or an opportunity
Squander means waste (something, especially money or time) in a reckless and foolish manner.

6. (b): "giving birth" means to bring something into existence.

7. (b): Eye to eye means If two people see eye to eye, they agree with each other. Hence only statements (i) and (ii) are grammatically and contextually correct.

8. (c): A stone's throw means a very short distance. Hence only statement (iii) is grammatically and contextually correct.

9. (e): Bite the bullet means to do or accept something unpleasant, often after a period of hesitation. Since all the three statements provide the appropriate context of the given idiom. Option (e) becomes the most suitable answer choice.

10. (d): The error lies in part (d) of the sentence. If the sentence compounds a positive and a negative subject and one is plural, the other singular, the verb should agree with the positive subject. Hence, 'decide' should be replaced by 'decides'.

11. (c): The error lies in part (c) of the sentence. 'know' should be replaced by 'knows'. Note that singular subjects joined by "or," "nor," "either . . . or," or "neither. . . nor" take a singular verb.

12. (c): The error lies in part (c) of the sentence. Note that 'To' is a preposition with several meanings, including "toward" and "until." While 'Too' is an adverb that can mean "excessively" or "also."

13. (b): The error lies in part (b) of the sentence. If hardly, scarcely, barely and no sooner are in the initial position, the subject and auxiliary are inverted. Thus, the correct phrase should be "No sooner had the company…"

14. (a): The error lies in part (a) of the sentence. Since the sentence is in past perfect tense, the correct phrase should be "I had read…"

15. (c): Holds in the first sentence means to have something, especially a position or money, or to control something: while 'holds' in the second sentence means to cause to stay or continue in the same way as before. All the other words are contextually irrelevant.

16. (a): In the first sentence, 'adapt' means to become adjusted to new conditions; while in the second sentence 'adapt' means alter (a text) to make it suitable for filming, broadcasting, or the stage. All the other words are contextually irrelevant.

17. (e): In the first sentence, 'reached' means to make a decision, agreement, etc. about something; while in the second sentence 'reached' means to stretch out your arm in order to get or touch something. All the other words are contextually irrelevant.
Resembled means have a similar appearance to or qualities in common with (someone or something); look or seem like.
Hovered means remain in one place in the air.
Recognized means acknowledge the existence, validity, or legality of.

18. (b): In the first sentence 'emerge' means to become known or develop as a result of something; while in the second sentence it means to recover from or survive a difficult situation.

19. (e): After carefully reading the sentences, we can say that sentence (B) is the first sentence of the paragraph as it introduces its theme which is about happiness. It has further mentioned a study conducted by Diener which mentioned the connection of happiness with their social relationships. This has been further explained in sentence (C). Next should be sentence (E) as it illustrates another factor (apart from social relationships) that affects the mood. This can be understood by taking a hint from ***"also"*** mentioned in sentence (E). Sentence (D) explains Diener's theory on temperament. Thus, sentence (D) should consecutively follow sentence (E). Sentence (F) should come next, as it provides the evidence supporting the theory of Diener about temperament. Sentence (A) should be the last sentence in the rearrangement. Thus, the final sequence formed is BCEDFA.

20. (a): After carefully reading the sentences, we can say that sentence (B) is the first sentence of the paragraph as it introduces its theme which is about happiness. It has further mentioned a study conducted by Diener which mentioned the connection of happiness with their social relationships. This has been further explained in sentence (C). Next should be sentence (E) as it illustrates another factor (apart from social relationships) that affects the mood. This can be understood by taking a hint from ***"also"*** mentioned in sentence (E). Sentence (D) explains Diener's theory on temperament. Thus, sentence (D) should consecutively follow sentence (E). Sentence (F) should come next, as it provides the evidence supporting the theory of Diener about temperament. Sentence (A) should be the last sentence in the rearrangement. Thus the final sequence formed is BCEDFA.

21. (d): After carefully reading the sentences, we can say that sentence (B) is the first sentence of the paragraph as it introduces its theme which is about happiness. It has further mentioned a study conducted by Diener which mentioned the connection of happiness with their social relationships. This has been further explained in sentence (C). Next should be sentence (E) as it illustrates another factor (apart from social relationships) that affects the mood. This can be understood by taking a hint from ***"also"*** mentioned in sentence (E). Sentence (D) explains Diener's theory on temperament. Thus, sentence (D) should consecutively follow sentence (E). Sentence (F) should come next, as it provides the evidence supporting the theory of Diener about temperament. Sentence (A) should be the last sentence in the rearrangement. Thus the final sequence formed is BCEDFA.

22. (c): After carefully reading the sentences, we can say that sentence (B) is the first sentence of the paragraph as it introduces its theme which is about happiness. It has further mentioned a study conducted by Diener which mentioned the connection of happiness with their social relationships. This has been further explained in sentence (C). Next should be sentence (E) as it illustrates another factor (apart from social relationships) that affects the mood. This can be understood by taking a hint from ***"also"*** mentioned in sentence (E). Sentence (D) explains Diener's theory on temperament. Thus, sentence (D) should consecutively follow sentence (E). Sentence (F) should come next, as it provides the evidence supporting the theory of Diener about temperament. Sentence (A) should be the last sentence in the rearrangement. Thus the final sequence formed is BCEDFA.

23. (d): After carefully reading the sentences, we can say that sentence (B) is the first sentence of the paragraph as it introduces its theme which is about happiness. It has further mentioned a study conducted by Diener which mentions the connection of happiness with their social relationships. This has been further explained in sentence (C). Next should be sentence (E) as it illustrates another factor (apart from social relationships) that affects the mood. This can be understood by taking a hint from ***"also"*** mentioned in sentence (E). Sentence (D) explains Diener's theory on temperament. Thus, sentence (D) should consecutively follow sentence (E). Sentence (F) should come next, as it provides the evidence supporting the theory of Diener about temperament. Sentence (A) should be the last sentence in the rearrangement. Thus, the final sequence formed is BCEDFA.

24. (a): The correct sequence is BADC.
Drone **technology(B)** is playing a **vital(A)** role in delivering food and other **essentials(D)** alongside relief **activities(C)**.

25. (e): The correct sequence is CDBA.
Freedom (C) of speech and expression **available (D)** to media is not on a higher **pedestal (B)** than the rights of **individual (A)** citizens.

26. (c): All the highlighted words in the given sentence are correctly placed. Hence, no rearrangement is required.

27. (a): The most suitable phrase to replace the highlighted incorrect phrase is "not only will you learn". Note that to add emphasis, we can use not only at the beginning of a clause. When we do this, we invert the subject and the verb,

28. (c): The most suitable phrase to replace the highlighted incorrect phrase is "who will notify the management". In a sentence, who is used as a subject while Whom is used as the object of a verb or preposition.

29. (e): The sentence is grammatically and contextually correct. Hence, no replacement is required.

30. (d): The correct replacement of the highlighted incorrect phrase is "having seen the trailer last week". The second part of the sentence is a participial phrase, which is a group of words consisting of a participle and the modifier(s) and/or (pro)noun(s) or noun phrase(s) that function as the direct object(s), indirect object(s), or complement(s) of the action or state expressed in the participle.

QUANTITATIVE APTITUDE

31. (b): Total unsold order of ice cream by shop E = $400 \times \frac{15}{100} \times \frac{10}{100} = 6$
Total unsold order of ice cream by shop D = $400 \times \frac{20}{100} \times \frac{5}{100} = 4$
Required percentage = $\frac{6-4}{4} \times 100 = 50\%$

32. (d): Total orders purchased by B = $400 \times \frac{20}{100} = 80$
Total order sold by B = $400 \times \frac{20}{100} \times \frac{75}{100} = 60$
Total order of chocolate ice cream purchased by B = $60 \times \frac{25}{100} \times \frac{3}{1} = 45$
Total order of vanilla ice cream purchased by B = $60 \times \frac{15}{100} \times \frac{100}{75} = 12$
So, total orders of strawberry purchased by B = 80 – (45 + 12) = 23

33. (d): Total cost for shop D
$= 400 \times \frac{20}{100} \times 200 = 16000\ Rs.$
Total sold by shop D = 95 % of 20% of 400 = 76
Total selling price = 175 * (25% of 76) + 250 *(75% of 76) = 175*19 + 250*57
= 3325+14250=17575
$Profit\ \% = \frac{(17575-16000)}{16000} \times 100 \approx 10\%$

34. (a): Unsold orders of ice cream for A
$= 400 \times \frac{10}{100} \times \frac{40}{100} = 16$
Unsold orders of ice cream for B
$= 400 \times \frac{20}{100} \times \frac{25}{100} = 20$
Unsold orders of ice cream for E
$= 400 \times \frac{15}{100} \times \frac{10}{100} = 6$
Required average = $\frac{16+20+6}{3}$ =14

35. (a): Total orders of ice cream purchased by shop X = $400 \times \frac{20}{100} \times \frac{125}{100} = 100$
Total unsold orders of ice cream by shop X = $400 \times \frac{35}{100} \times \frac{20}{100} - 400 \times \frac{20}{100} \times \frac{5}{100} = 24$
So, total sold orders of ice cream by shop X = 100 – 24 = 76

36. (e): Required central angle = $\frac{35}{100} \times 360° = 126°$

37. (a): Let total initial mixture = 7x

ATQ –

$(6x - 21 \times \frac{6}{7} + 77) + (x - 21 \times \frac{1}{7}) = 14x$

$7x = 56$

$x = 8$

So, quantity of the initial mixture= $7x = 56$ liters

38. (e): ATQ –

$\frac{L+L\times\frac{40}{100}}{108\times\frac{5}{18}} = 28$

$1.4L = 840$

$L = 600$ meters

And, length of platform = $0.4 \times 600 = 240$ meters

Let length of train B = X meters

$\frac{X+240}{24} = 90 \times \frac{5}{18}$

X = 360 meters

Required time = $\frac{600+360}{(108-90)\times\frac{5}{18}} = \frac{960}{5} = 192$ sec

39. (b): Let total work = 90x unit

Efficiency of A = $90x \times \frac{45}{100} \times \frac{4}{45} = 3.6x\ unit/day$

Efficiency of B = $90x \times \frac{30}{100} \times \frac{1}{3} = 9x\ unit/day$

Efficiency of (A + B + C) = $90x \times \frac{4}{25} = 14.4x$ unit/day

So, efficiency of C = 14.4x – (3.6x + 9x) = 1.8x units/day

Required percentage = $\frac{3.6x-1.8x}{3.6x} \times 100 = 50\%$

40. (b): Let six years ago age of Kunal and Sagar was 6x and 5x respectively

ATQ –

$\frac{6x+10}{5x+10} = \frac{11}{10}$

$60x + 100 = 55x + 110$

$5x = 10$

$x = 2$ years

So, present age of Sagar = $5x + 6 = 10 \times 2 + 6 = 16\ years$

41. (b): Profit ratio of A, B & C respectively = $2400 \times 6 : 2800 \times 12 : 2400 \times 1.2 \times 2$

$= 14400 : 33600 : 5760$

$= 15 : 35 : 6$

Let total profit = 56x Rs.

Given, $15x + 6x = 4200$

$x = 200$ Rs.

So, total profit = $56 \times 200 = 11200$ Rs.

42. (d): First year total Interest

$=12000 \times \frac{20}{100} = 2400$ Rs.

For second year total amount

$=(12000 + 2400 + X)$

$(12000 + 2400 + X) \times \frac{120}{100} = 20400$

X = 2600 Rs.

43. (a): I. $x = \pm 16$

II. $y^2 - 16y - y + 16 = 0$

$y(y - 16) - 1(y - 16) = 0$

$(y - 1)(y - 16)$

$y = 1$ & 16

So, no relation can be established

44. (e): I. $x^2 + 10x + 10x + 100 = 0$

$x(x + 10) + 10(x + 10) = 0$

$(x + 10)(x + 10) = 0$

$x = -10$

II. $y^2 + 10x + 3y + 30 = 0$

$y(y + 10) + 3(y + 10) = 0$

$(y + 10)(y + 3)$

$y = -10\ -3$

So, $x \leq y$

45. (a): **I.** $4x^2 - 8x - 5 = 0$

$4x^2 - 10x + 2x - 5 = 0$

$2x(2x - 5) + 1(2x - 5) = 0$

$(2x + 1)(2x - 5) = 0$

$x = -\frac{1}{2}, \frac{5}{2}$

II. $2y^2 - 4y - 7y + 14 = 0$

$2y(y - 2) - 7(y - 2) = 0$

$(2y - 7)(y - 2) = 0$

$y = 2, \frac{7}{2}$

So, no relation can be established between x & y.

46. (c): **I.** $6x^2 + 3x + 2x + 1 = 0$

$(3x + 1)(2x + 1) = 0$

$x = -\frac{1}{2}, -\frac{1}{3}$

II. $20y^2 + 5y + 4y + 1 = 0$

$(4y + 1)(5y + 1) = 0$

$y = -\frac{1}{4}, -\frac{1}{5}$

So, y > x

47. (d): **I.** $2x^2 - 9x + 9 = 0$

$2x^2 - 6x - 3x + 9 = 0$

$(2x-3)(x-3) = 0$

$x = \frac{3}{2}, 3$

II. $6y^2 - 17y + 12 = 0$

$6y^2 - 8y - 9y + 12 = 0$

$(2y-3)(3y-4) = 0$

$y = \frac{3}{2}, \frac{4}{3}$

So, $x \geq y$

48. (c): **I.** $4x^2 - 17x + 15 = 0$

$4x^2 - 12x - 5x + 15 = 0$

$4x(x - 3) - 5(x - 3) = 0$

$(x - 3)(4x - 5) = 0$

$x = 3, \frac{5}{4}$

II. $2y^2 - 17y + 35 = 0$
$2y^2 - 10y - 7y + 35 = 0$
$2y(y - 5) - 7(y - 5) = 0$
$(y - 5)(2y - 7) = 0$
$y = 5, \frac{7}{2}$
So, $y > x$

49. (b): Given, X = 1.25Y
ATQ –
$\frac{1.25Y \times 2 \times 20}{100} - \frac{Y \times 2 \times 20}{100} = 480$
Y = 4800
X = 1.25 × 4800
X = 6000 Rs.
Required sum = 4800+6000 = 10800 Rs.

50. (b): Let cost price of Jeans = 100x Rs.
Marked price of Jeans = 125x Rs.
Selling price of jeans = $125x \times \frac{90}{100} \times \frac{95}{100}$
= 106.875x Rs.
ATQ —
$106.875x - 100x = 89.1$
$x = 12.96$
Cost price of jeans = 1296 Rs.
For 40% of profit
Selling price = $1296 \times \frac{140}{100}$ = 1814.4 Rs.

51. (d): ATQ,
$\frac{6}{12+6+x} = \frac{2}{9}$
$\Rightarrow x = \frac{18}{2} = 9$
Required probability = $\frac{9+12}{12+6+9} = \frac{21}{27} = \frac{7}{9}$
Alternate,
Required Probability = 1 – Probability of choosing one green ball
$= 1 - \frac{6}{27} = \frac{7}{9}$

52. (c): Let the unit digit and tens digit of the number be y and x respectively.
Original number=(10x+y)
ATQ
1.75(10x+y) =10y+x
x: y=1:2
let the unit and tens digits be 2a and 1a respectively
Now, (21a) +9=2(12a)
a=3
unit digit=6
and tens digit=3
Sum of both the digits=9

53. (e): Let still water speed of boat is x km/hr and speed of current y km/hr
ATQ—
Let d be the distance covered by boat in downstream.
$\frac{\frac{3d}{4}}{(x-y)} = 2\frac{d}{(x+y)}$
$\frac{x}{y} = \frac{11}{5}$
x : y = 11 : 5

54. (b): Total vacant seats in bus E = $15 \times \frac{40}{100} \times \frac{100}{40} = 15$
So, total vacant seats in bus A, B, C & D = 40 – 15 = 25
Total number of vacant seats in D = $40 - (15 + 20 \times \frac{40}{100} + 24 \times \frac{25}{100} + 15 \times \frac{40}{100}) = 5$

55. (b): Total vacant seats in bus B = $24 \times \frac{25}{100} = 6$
Total booked seats in bus A = $20 \times \frac{60}{100} = 12$
Required ratio = 6 : 12 = 1 : 2

56. (d): Vacant seats in bus A = $20 \times \frac{40}{100} = 8$
Vacant seats in bus C = $15 \times \frac{40}{100} = 6$
Required percentage = $\frac{8-6}{8} \times 100 = 25\%$

57. (c): Total seats available in bus E = $24 \times \frac{75}{100} \times \frac{25}{18} \times \frac{8}{5} = 40$
So, total seats available in bus D = 65 – 40 = 25
Required percentage = $\frac{20 \times \frac{40}{100} + 15 \times \frac{40}{100} + 25 \times \frac{20}{100}}{(20+15+25)} \times 100$
$= \frac{8+6+5}{60} \times 100 = 31\frac{2}{3}\%$

58. (b): Let total seats in bus D = x
So, total seats in bus E = (65 – x)
ATQ –
$(65 - x) \times \frac{3}{8} - x \times \frac{20}{100} = 10$
$975 - 15x - 8x = 400$
$23x = 575$
$x = 25$
So, required ratio = $25 \times \frac{80}{100} : (65 - 25) \times \frac{5}{8}$
= 20 : 25 = 4 : 5

59. (a): Required average = $\frac{20 \times \frac{60}{100} + 24 \times \frac{75}{100} + 15 \times \frac{60}{100}}{3}$
$= \frac{12+18+9}{3} = 13$

60. (e): $\approx 380 + 64 - ? + 901 = 970$
$\approx ? = 1345 - 970$
$\approx ? = 375$

61. (a): $\approx \left(\frac{90}{100} \times 7000 + 576\right) \div ? = 1719$
$\approx ? = \frac{6876}{1719} \approx ? = 4$

62. (d): $160 + ? = \frac{64}{100} \times 350$

$? = 224 - 160$

$? = 64$

63. (e): $\frac{312}{?} + 169 = \frac{20}{100} \times 910$

$\frac{312}{?} = 182 - 169$

$\frac{312}{?} = 13$

$? = 24$

64. (b): $200 + \frac{12}{100} \times 500 - 4 = ?^2$

$256 = ?^2$

$? = 16$

65. (d): $\frac{84}{?} + \frac{26}{100} \times 800 + 2 = 216$

$\frac{84}{?} = 216 - 210$

$? = 14$

REASONING ABILITY

66. (e): 729645138

638754029

8*4=32

Directions (67-71):

Department				
IT	P	J	N	
HR	M	O		
Production	L	Q	K	R

67. (e): **68. (a):** **69. (c):**

70. (b): **71. (a):**

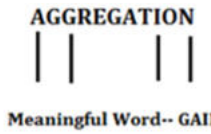
Directions (72-76):

Month	Persons	Topics
January	E	Tea
May	C	Juice
June	A	Diaper
July	F	Coffee
September	D	Baby lotion
December	B	Cold drink

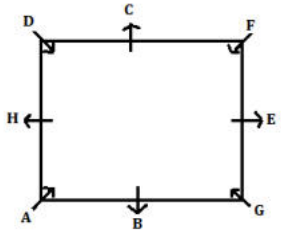
72. (b): **73. (a):** **74. (d):**

75. (a): **76. (d):**

77. (c):



Directions (78-81):



78. (c):

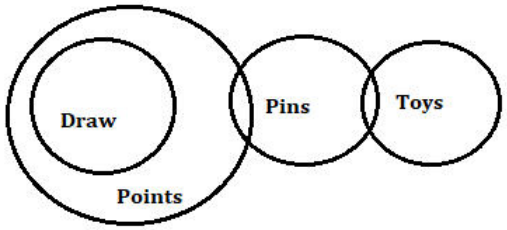
79. (a):

80. (c):

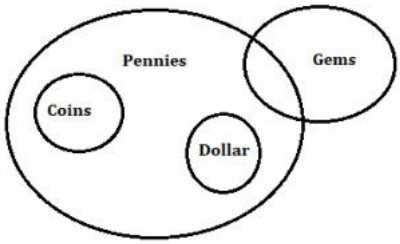
81. (d):

Directions (82-85):

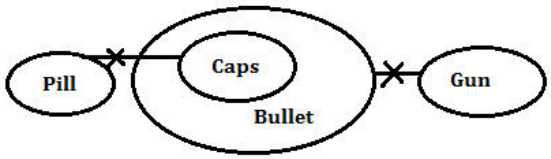
82. (d):



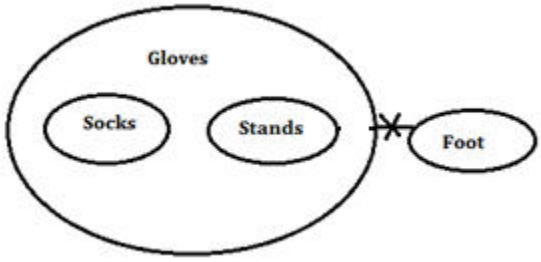
83. (a):



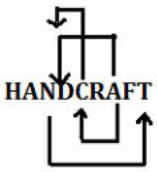
84. (b):



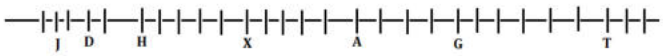
85. (e):



86. (d):



Directions (87-89):



87. (d):

88. (a):

89. (b):

Direction (90-93):

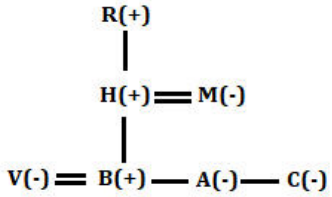
Month	Date	Persons
February	13	D
	24	S
April	13	P
	24	B
August	13	Q
	24	R
October	13	M
	24	H

90. (b): **91. (a):** **92. (d):**

93. (e):

94. (b): CARBONIZE
BBQAPMJYF

Direction (95-96):



95. (b):

96. (c):

Direction (97-100):

Jar	Water in lt.
C	33
D	
A/B	
B/A	
F	15
E	

97. (e): **98. (d):** **99. (a):**

100. (e):

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Part-XII

REASONING ABILITY

Direction (1-5): Study the following information carefully and answer the questions given below:

There are eight employees of a company and all of them are working on eight different designation of a bank viz. Chairman, CFO, GM, DGM, AGM, Manager, Junior Manager and Clerk. All the designations given are to be considered in a given order (as Chairman is considered as Senior-most and Clerk is considered as the Junior-most).

Only two persons are senior to B. One designation lies between B and G. The number of persons junior to G is same as the number of persons senior to C. H is just senior to E, but junior to C. More than four designations lie between H and F. D is junior to A.

1. How many persons are junior to H?
(a) None (b) One (c) More than four
(d) Four (e) Three

2. Four of the following five are alike in a certain way and hence they form a group. Which one of the following does not belong to that group?
(a) A-F (b) B-A (c) H-D
(d) G-A (e) E-H

3. How many designation gaps are between A and D?
(a) More than three (b) Two (c) Three
(d) One (e) None

4. Who among the following is just senior to B?
(a) A (b) D (c) C
(d) E (e) None of these

5. Who among the following is AGM?
(a) F (b) B (c) G
(d) D (e) None of these

Direction (6-8): In each of the questions below are given some statements followed by some conclusions. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.
(a) If only conclusion I follows.
(b) If only conclusion II follows.
(c) If either conclusion I or II follows.
(d) If neither conclusion I nor II follows.
(e) If both conclusions I and II follow.

6. **Statements:** Some Banana are Orange.
All Orange are Apple.
Conclusions: I. Some Banana are not Apple.
II. Some Orange are Banana.

7. **Statements:** Only a few East are North.
Few North are South.
All South are West.
Conclusions: I. All East being North is a possibility.
II. Some East are West.

8. Statements: Only a few Song are Melody.
Only a few Melody are Film.
No Film is Award.
Conclusions: I. All Song being Film is a possibility.
II. Some Melody are not Award.

Direction (9-12): Study the following information carefully and answer the questions given below:
In a certain code language:
"Club house near located" is coded as "ol gp ox ot"
"both club view near" is coded as "mt ox sq ot"
"make located house view" is coded as "nk ol gp sq"
"near club view area" is coded as "ot ox sq tm"

9. What is the code for "both" in the given code language?
(a) ox (b) sq (c) mt
(d) ot (e) Either (b) or (c)

10. What is the code for "house" in the given code language?
(a) ol (b) ox (c) gp
(d) Either (a) or (c) (e) None of these

11. The code "nk" is stands for?
(a) make (b) both (c) area
(d) club (e) None of these

12. What may be the possible code for "both house" in the given code language?
(a) gp mt (b) mt nk (c) mt sq
(d) ox mt (e) gp sq

Directions (13-17): Study the following information carefully and answer the questions given below:
There are eight persons A, B, C, D, E, F, G and H sitting around a circular table facing towards the centre of the table but not necessarily in the same order.
B sits third to the right of A. Only one person sits between B and D. E faces C who is not an immediate neighbour of B. G sits third to the left of F. A is not an immediate neighbour of F.

13. Who among the following sits to the immediate left of C?
(a) G (b) D (c) F
(d) H (e) None of these

14. Who among the following sits to the opposite of A?
(a) H (b) G (c) F
(d) D (e) None of these

15. How many persons sit between H and G when counted from the left of G?
(a) Two (b) One (c) Three
(d) Four (e) None of these

16. If all the persons sit around the circle in clockwise direction by their names according to English alphabetical order starting from A, then how many persons remain unchanged except A?
(a) Four (b) One (c) Three
(d) Two (e) None of these

17. What is the position of B with respect to H?
(a) Fourth to the left
(b) Fourth to the right
(c) Third to the right
(d) Both (a) and (c)
(e) Both (a) and (b)

Direction (18-20): Study the following information carefully and answer the questions given below:

Point E is in 15m north of Point D. Point F is in 20m north of Point C. Point A is in 35m east of Point F. Point P is in 25m south of Point A. Point E is in 20m east of Point P.

18. What is the direction of point F with respect to point P?
(a) North-west (b) North-east (c) South-west
(d) South-east (e) North

19. Four of the following five are alike in a certain way and hence they form a group. Which one of the following does not belong to that group?
(a) C-P (b) A-E (c) A-C
(d) P-D (e) F-E

20. If point X is 20m south of point C, then what is the total distance between point X and point D?
(a) 40m (b) 35m (c) 55m
(d) 65m (e) 85m

Directions (21-25): Following questions are based on the five numbers given below, Study the given information and answer the following questions.
625 427 189 258 469

21. What is the sum of the 3rd digit of second number from left and 2nd digit of third number from right?
(a) 10 (b) 15 (c) 14
(d) 12 (e) None of these

22. If the position of first and third digits of each of the numbers are interchanged, then which among the following is the highest number?
(a) 258 (b) 469 (c) 189
(d) 427 (e) 625

23. If all the digits in the number are arranged in the descending order within the number from left to right, then which among the following will be the lowest number after rearrangement?
(a) 427 (b) 189 (c) 258
(d) 625 (e) 469

24. What is the product of 3rd digit of 2nd lowest number and 1st digit of 2nd highest number?
(a) 32 (b) 72 (c) 24
(d) 36 (e) None of these

25. If 2 is subtracted from each number then how many numbers thus formed are odd numbers?
(a) One (b) Two (c) Three
(d) More than three (e) None

26. How many such numerals are there in the number '645903287' which will remain at the same position when arranged in ascending order from left to right?
(a) Three (b) Two (c) One
(d) Four (e) None of these

27. If it is possible to make only one meaningful word with the 1st, 3rd, 5th and 11th letters of the word 'INHERITENCE', which would be the third letter of the word from the left? If more than one such word can be formed give 'Y' as the answer. If no such word can be formed, give 'Z' as your answer.
(a) Y (b) R (c) I
(d) E (e) Z

Direction (28-32): Study the following information carefully and answer the questions given below:

Eight persons A, B, C, D, E, F, G and H are buying some products one after another but not necessarily in the same order.
At most two persons are buying products before F. Only one person is buying between D and F. C is buying just before H. One person is buying between C and D. A is buying just before E. B is buying before G and after E.

28. How many persons are buying their products after D?
(a) None
(b) Two
(c) More than three
(d) One
(e) None of these

29. Who among the following is buying just after G?
(a) E (b) F (c) B
(d) C (e) None of these

30. If all the persons are arranged in alphabetical order from left to right starting from A, then find how many persons remains at the same position (excluding A)?
(a) One (b) None (c) Two
(d) Four (e) More than Four

31. Who among the following is buying exactly between D and F?
(a) E (b) B (c) A
(d) H (e) None of these

32. How many persons are buying between E and C?
(a) Five (b) Four (c) Three
(d) None (e) Two

Directions (33-35): In each of the question, relationships between some elements are shown in the statements. These statements are followed by conclusions numbered I and II. Read the statements and give the answer.
(a) If only conclusion I follows.
(b) If only conclusion II follows.
(c) If either conclusion I or II follows.
(d) If neither conclusion I nor II follows.
(e) If both conclusion I and II follows.

33. Statements: $P > Q \geq R = S < T = U$
Conclusions: I. $Q > S$ II. $S = Q$

34. Statements: $J < D = L \leq K \leq Q \geq R$
Conclusions: I. $J < Q$ II. $L \leq R$

35. Statements: $O > P = G > B \geq X = M \leq H$
Conclusions: I. $G > X$ II. $O > M$

Quantitative Aptitude

Directions (36-40): Table given below shows the number of male and female participated in an event from five different schools (A, B, C, D & E). Study the table carefully and answer the following questions.

Schools	Male	Female
A	650	450
B	540	420
C	720	500
D	560	450
E	680	320

36. Find average number of female participated from school – A, B & D.
(a) 400 (b) 380 (c) 350
(d) 440 (e) 450

37. Total male participated from school – B & D together are how much more or less than total female participated from school – A & C together?
(a) 150 (b) 110 (c) 170
(d) 120 (e) 240

38. Total male participated from school – B & C together are what percent more or less than total female participated from school – A & D together?
(a) 20% (b) 60% (c) 50%
(d) 40% (e) 30%

39. If total male participated from school – F are 40% more than that of from school – A and ratio of female participated from school – B to that of from school – F is 21:32, then find total students participated from school – F.
(a) 1420 (b) 1550 (c) 1580
(d) 1460 (e) 1490

40. Find total number of male students participated from all the five schools together.
(a) 2860 (b) 3150 (c) 2940
(d) 3200 (e) 3020

Direction (41–45): What will come in the place of question (?) mark in following number series:

41. ?, 100, 150, 375, 1312.5
(a) 100 (b) 200 (c) 150
(d) 400 (e) 50

42. 104, ?, 96, 120, 88, 128
(a) 112 (b) 110 (c) 114
(d) 118 (e) 108

43. 15, 8, 9, 15, 32, ?
(a) 66 (b) 99 (c) 80
(d) 82.5 (e) 80.5

44. 6, 8, 14, 26, 46, ?
(a) 72 (b) 84 (c) 96
(d) 80 (e) 76

45. 72000, 36000, 12000, 3000, 600, ?
(a) 120 (b) 200 (c) 300
(d) 150 (e) 100

46. 12 men can do a work in 10 days while 10 women can do the same work in 18 days. In how many days 4 men & 6 women together can do the same work?
(a) $\frac{120}{7}$ days (b) 24 days (c) $\frac{180}{13}$ days
(d) 15 days (e) 18 days

47. A car can cover a distance in 4 hour at speed 60 kmph then by what percent should the speed of car be increased to cover the same distance in 2.5 hr?
(a) 60% (b) 40% (c) 50%
(d) 100% (e) 75%

48. The ratio of the ages of Ram and Rahim 10 years ago was 1 : 3. The ratio of their ages five years hence will be 2 : 3. Then, the ratio of their present ages is :
(a) 1 : 2 (b) 3 : 5 (c) 3 : 4
(d) 2 : 5 (e) None of these

49. Two trains of length 140m & 120m are running in same direction on parallel tracks with speeds 132 kmph & 80 kmph respectively. How much time will they take to cross each other?
(a) 7.09 sec (b) 18 sec (c) 11.7 sec
(d) 4.42 sec (e) Cannot be determined

50. A person sold a book at 20% profit. If he had bought it at 10% less cost and sold for Rs 90 more then he would have gained 40% profit. Find cost price of book.
(a) Rs 800 (b) Rs 1600 (c) Rs 1500
(d) None of these (e) Rs 1200

Direction (51–55): In each question two equations numbered (I) and (II) are given. You have to solve both the equations and mark appropriate answer.
(a) If x = y or no relation can be established
(b) If x > y
(c) If x < y
(d) If x ≥ y
(e) If x ≤ y

51. I. $x = \sqrt{25}$ **II.** $y^3 = 125$

52. I. $x^2 + 2x - 35 = 0$ **II.** $y^2 + 15y + 56 = 0$

53. I. $x^2 = 81$ **II.** $y^2 = 64$

54. I. $17x^2 - 14x - 83 = -80$ **II.** $y^2 = 2y + 35$

55. I. $x^2 + 4x - 45 = 0$ **II.** $y^2 - 13y + 40 = 0$

56. A container contains mixture of milk & water in ratio 5 : 3 respectively. If 8 lit milk is added in it then ratio of milk to water becomes 11 : 5. Find difference between initial quantity of milk & that of water.
(a) 5 lit (b) 38 lit (c) 18 lit
(d) 30 lit (e) 10 lit

57. Rs 6000 when invested at a certain rate at SI for 2 years, it fetches Rs 1200. If same sum is invested at same rate for a year compounded half – yearly then find compound interest.
(a) Rs 615 (b) Rs 600 (c) Rs 1200
(d) Rs 585 (e) Rs 1260

58. A boat can cover 28 km downstream in 42 min. ratio of speed of boat in still water to speed of stream is 7 : 3. Find difference between time taken by boat to cover 60 km downstream & 40 km upstream.
(a) 2.25 hr (b) 1 hr (c) 1.5 hr
(d) 0.4 hr (e) 0.9 hr

59. A & B entered into a business by investing total capital of Rs 17000. B withdraws Rs 1500 after 6 months and gets Rs 8100 as profit out of total profit of Rs 19500 at the end of year. Find capital of B after 6 months from starting.
(a) Rs 7000 (b) Rs 9500 (c) Rs 7500
(d) Rs 6000 (e) Rs 6500

60. If length of a rectangle increases by 40% while keeping breadth constant then area of rectangle increased by 24 m^2 and perimeter of original rectangle is 32 m. find breadth of rectangle.
(a) 8.4 m (b) 10 m (c) 6 m
(d) 14 m (e) 8 m

Direction (61–70): What will come in the place of (?) mark in following question.

61. 280 ÷ 4 ÷ 2 = 170 – ?
(a) 105 (b) 115 (c) 125
(d) 135 (e) 145

62. $(\sqrt{144} + \sqrt{169}) \times 3 = \frac{?}{5}$
(a) 375 (b) 325 (c) 350
(d) 275 (e) 475

63. $(12 \times 5 \div 4) \times 8 = ?$
(a) 100 (b) 140 (c) 120
(d) 80 (e) 90

64. (120% of 750) ÷ ? = 25
(a) 30 (b) 36 (c) 24
(d) 18 (e) 48

65. $8\frac{1}{2} - 4\frac{5}{6} = ? - 3\frac{7}{12}$
(a) $3\frac{1}{4}$ (b) $3\frac{5}{12}$ (c) $2\frac{7}{12}$
(d) $7\frac{1}{4}$ (e) $5\frac{2}{3}$

66. 275 + 64% of 750 = 750 + ?
(a) 25 (b) 8 (c) 10
(d) 15 (e) 5

67. $\sqrt{225} + \sqrt{81} + 12^2 = ?$
(a) 168 (b) 164 (c) 162
(d) 172 (e) 182

68. $\frac{510}{?} = \sqrt{324} + 3.25$
(a) 12 (b) 48 (c) 24
(d) 6 (e) 18

69. 12.5% of (120 + ?) = 45
(a) 160 (b) 180 (c) 360
(d) 240 (e) 120

70. $572 \div 13 \times 12 - 16 = (8)^?$
(a) 4 (b) 2 (c) 3
(d) 5 (e) None of these

English Language

Directions (71-77) Read the given passage carefully and answer the following questions. Certain parts have been highlighted to help answer the questions.

Every year, around one million people die of mosquito-borne diseases according to the World Health Organization (WHO). This is why mosquitoes are considered one of the **deadliest** living creatures on the planet — not because they are lethal themselves, but because many of the viruses and parasites they transmit are.

In the absence of an effective vaccine for dengue fever, Zika fever, chikungunya and other mosquito-borne diseases, researchers have developed genetic strategies to reduce mosquito populations. One such strategy involves the release into the wild of genetically modified (GM) mosquitoes that express a lethal gene — a strategy believed to have little impact on the overall DNA of wild populations of mosquitoes.

The transfer of new genes from GM organisms to wild or domesticated non-GM populations is a key criticism of GM crops like soybean and corn. There are concerns that the introduction of GM genes into non-target species could have negative consequences for both human and environmental health.

Oxitec, a company that spun out of research at Oxford University in the early 2000s, developed and trademarked GM Friendly™ mosquitoes (also known as strain OX513A of Aedes aegypti). These male GM mosquitoes have what the company describes as a "self-limiting" gene, which means that when these so-called friendly mosquitoes' mate, their offspring inherit the self-limiting gene which is supposed to prevent them surviving into adulthood.

In theory, when these mosquitoes are released in high numbers, a dramatic reduction in the mosquito population should follow. According to research published by Oxitec researchers in 2015, field trials involving recurring releases of Friendly™ mosquitoes demonstrated a reduction of nearly 95 per cent of target populations in Brazil. In these field trials, experiments were not performed to assess whether GM mosquitoes might persist in the wild.

A recent study from the Powell lab at Yale University has since confirmed that some of the offspring of the GM mosquitoes didn't succumb to the self-limiting lethal gene and **survived** to adulthood. They were able to breed with native mosquitoes and thereby introduce some of their genes into the wild population.

Meanwhile, the impact of mosquitoes carrying these new genes remains largely unknown. One significant worry is that a new breed of mosquito might emerge that is more difficult to control. These new genes could also potentially alter evolutionary pressures on viruses carried by mosquitoes, like dengue fever, in unpredictable ways. This includes potentially increasing their virulence or changing their host-insect interactions. These are hypothetical risks that have been raised by scientists, and reflect the need for further study.

71. Why are mosquitoes considered as one of the deadliest living creatures on earth?
(a) Capability to transmit life threatening diseases.
(b) Mosquito bites cause fatal reactions in human beings
(c) Mosquitoes cannot be killed easily
(d) Both (a) and (c)
(e) None of the above

72. What is one of the methods being developed to control population of mosquitoes?
(a) Spraying of pesticides using established procedures.
(b) Introduction of a lethal gene into wild populations of mosquitoes using genetically modified ones.
(c) Not letting any stagnant water build-up near homes
(d) Both (a) and (b)
(e) None of the above

73. What can be the potential side effect(s) of genetically modified mosquito offspring**?**
(a) Evolution of a breed of mosquitoes which are more difficult to control
(b) Increase in the severity of diseases being currently transmitted by mosquitoes.
(c) Change in host-insect interactions.
(d) Loss of natural populations of mosquitoes
(e) (a), (b) and (c)

74. Which of the statements can be considered as true with respect to the passage given?
(a) Field trials on Genetically modified mosquitoes showed reduction of 96% target populations.
(b) Oxitec trademarked the GM Friendly mosquitoes in 2015.
(c) The female GM mosquito has a self-limiting gene
(d) Both (a) and (b)
(e) None of the above

75. What is the desired effect of releasing GM mosquitoes containing the 'Self-limiting Gene'?
(a) A substantial reduction in the population of mosquitoes.
(b) Birth of mosquitoes without a biting mechanism

(c) Decrease in the number of diseases caused due to mosquitoes
(d) Increase in the number of male mosquitoes.
(e) Both (b) and (c)

76. Which of the following word is similar to **deadliest** as mentioned in the passage given?
(a) fatal (b) demeaning (c) fulfil
(d) harmless (e) None of the above

77. Which of the statements can be considered as true with respect to the passage given??
(a) GM mosquitoes are able to introduce some of their genes into the wild population.
(b) Mosquitoes having GM genes have been thoroughly researched upon.
(c) Oxitec released its friendly mosquitoes in Brazil
(d) (a) and (c)
(e) All of the above

Directions (78-80): A word has been given in each question and has been used in the sentences given below. Identify the statements where the word has been used in a contextually and grammatically correct manner. If the word has been used correctly in all the statements, mark (e), "All of these", as your answer.

78. HOSTILE
(i) He made **hostile** efficiency a key part of his budget plan.
(ii) There has been a **hostile** reaction to the government's proposed tax increase.
(iii) The security forces exercised great restraint by not responding to **hostile** attacks and threats.
(a) Only (i)
(b) Both (i) and (ii)
(c) Both (ii) and (iii)
(d) Only (iii)
(e) All of these

79. VAGUE
(i) The judges determined that the law was too **vague** to be fairly enforced.
(ii) The merger of these two companies would **vague** the world's biggest accounting firm
(iii) The president had a **vague** reception in Ohio this morning.
(a) Only (i)
(b) Both (i) and (ii)
(c) Both (ii) and (iii)
(d) Only (iii)
(e) All of these

80. ESCALATE
(i) The pedestrian was jaywalking when he **escalate** the busy street, walking straight into the path of an oncoming vehicle.
(ii) We've tried to **escalate** the most likely problems, but it's impossible to be prepared for every eventuality.
(iii) The decision to **escalate** UN involvement has been made in the hopes of a swift end to the hostilities.
(a) Only (i)
(b) Both (i) and (ii)
(c) Both (ii) and (iii)
(d) Only (iii)
(e) All of these

Directions (81-85): In the following question, four sentences are given which may be grammatically and contextually incorrect. You need to find the one which has no error and mark that as your answer. If all the given sentences are incorrect then mark option (e) i.e. 'all are incorrect' as your answer.

81. (a) India's chocolate market is pegged at Rs.11,000 crore, of which premium chocolates can be sized anywhere among 10% and 15%.
(b) South Korea reported 52 new case of coronavirus.
(c) ITC has plans to work with cocoa farmers directly in future.
(d) The company initially invested Rs. 100 crore to set up a greenfield chocolate manufacture facility in Haridwar.
(e) All are incorrect

82. (a) Ratnakar Bank was rename as RBL Bank by the government.
(b) The government expects all the mergers of public sector banks, which were announced in 2019, to become effective from April 1.
(c) Analysts believe that lower gas prices would be bad with exploration
(d) The Central Drugs Standard Control Organisation will be regulate the medical devices now.
(e) All are incorrect

83. (a) Mahindra Renewables will sell its entire stake in 3 subsidiaries to CLP India, a part of Hong Kong-based CLP Group, as nearly ₹340 crore.
(b) The agreement will be signed to Doha city between Taliban representatives and U.S. special envoy Zalmay Khalilzad.
(c) The U.S. intelligence community publicly concluded that Russia intervened in there security matters.
(d) The injured animal was nursed back to health by the zookeeper and then released back into the wild
(e) All are incorrect

84. (a) English language have the potential to connect the world without any barriers
(b) P.K. Sinha was appointed in the PMO when Nripendra Misra, the then Principal Secretary, resigns.
(c) She drink the caramel liquid too fast and was soon too dizzy to stand.
(d) You're coming to the party, isn't you?
(e) All are incorrect

85. (a) Tamil Nadu is likely to get three textile parks and a technology research centre under schemes that the Union Ministry of Textiles is formulating.
(b) What is the uses of a house if you haven't got a tolerable planet to put it on?
(c) You have brushed your teeth today?
(d) Rahul had barely nothing to help the poor children.
(e) All are incorrect

Directions (86-90): In the following questions, a sentence is divided into four parts consisting of a highlighted word in each part. Choose the option reflecting the word which is either misspelt or grammatically incorrect. If all the highlighted words are correct, choose option (e) i.e. "all are correct" as your answer choice.

86. The manager **balanced (A)** the **strength (B)** of his team against that of their **opponent** (C) and **sighed**. (D)
(a) balanced (b) strength (c) opponent
(d) sighed (e) All are correct

87. One evening Rohan **pripared (A)** a nice **supper (B)** and put it on low heat in the oven to keep it **tepid (C)** while his wife **dressed**. (D)
(a) prepared (b) supper (c) tepid
(d) dressed (e) All are correct

88. She was able to **breathe (A)** easier when she stood outside the **massive(B) fortress (C)** that sat on a clearing the size of two **footbal** (D) fields.
(a) breathe (b) massive (c) fortress
(d) football (e) All are correct

89. From time to time Jack would **looking over(A)** Mungo's shoulder, **suggesting(B) tactics (C)** which invariably proved **disastrous**.(D)
(a) looking over (b) suggesting (c) tactics
(d) disastrous (e) All are correct

90. Horrified (A) passengers saw Olive **stumble (B)** and **fall of (C)** a platform as an express **roared (D)** in.
(a) Horrified (b) stumble (c) fall of
(d) roared (e) All are correct

Directions (91-95): In the following questions, a grammatically correct and meaningful sentence is given which is divided into five parts, where the first part is fixed and highlighted , in the remaining parts of the sentence namely (A),(B),(C) and (D) You have to arrange the four parts to make a contextually and grammatically meaningful sentence. If no such rearrangement is possible mark (e) as your answer i.e. 'No rearrangement required'.

91. (A) the merger of Bharti Infratel
(B) the world's second largest
(C) and Indus Towers will create
(D) tower company
(a) BCDA (b) CBDA (c) ACBD
(d) DCAB (e) No rearrangement is required

92. (A) upcoming visit to India
(B) the long-awaited trade agreement
(C) during US President Donald Trump's
(D) appears to be off the table
(a) DABC (b) BDCA (C) CDAB
(d) ADCB (e) No rearrangement required

93. (A) Leaders of the Railway Employees Organization
(B) alleged that the government wants to
(C) hand over the rail infrastructure
(D) to the private operators for financial benefit
(a) ADCB (b) BACD (c) CDBA
(d) DABC (e) No rearrangement required

94. (A) China has not yet given
(B) India the go-ahead to send an
(C) to coronavirus hit Wuhan
(D) aircraft with medical supplies
(a) DACB (b) ABDC (c) CBDA
(d) BCDA (e) No rearrangement is required

95. (A) mammals and birds move from
(B) with a change in season, many
(C) one country to another in search of food
(D) and shelter, and for breeding
(a) ACBD (b) CADB (c) DABC
(d) BACD (e) No rearrangement is required

Directions (96-100): In the following passage there are blanks, each of which has been numbered. These numbers are printed below the passage and against each, five options are given. Find out the appropriate word which fits the blank appropriately.

Bumblebees, among the most important pollinators, are in **(96)** _____. Fuzzy and buzzy, they excel at spreading pollen and fertilizing many types of wild flora, as well as crucial agricultural crops like tomatoes, blueberries, and squash. But their numbers are **(97)** _____. New research using a massive dataset found that the insects are far less common than they used to be;

in North America, you are nearly 50 percent less likely to see a bumblebee in any given area than you were prior to 1974. Moreover, several once-common species have **(98)** _____ from many areas they were once found, becoming locally extinct in those places. For example, the rusty patched bumblebee, which used to flourish in Ontario, is no longer found in all of Canada—in the U.S., it's endangered. In a new paper published this week in the journal Science, researchers used a complex modeling process to **(99)** _____ that their **(100)**_____ is driven in large part by climate change. Specifically, the scientists found that in areas that have become hotter in the last generation, or have experienced more extreme temperature swings, bumblebees are less abundant. In Europe, they are 17 percent less plentiful than they were in the early 20th century. The scientists examined the abundance of 66 species across the two continents.

96. (a) extinct (b) trouble (c) dropped (d) growth (e) difficult

97. (a) increasing (b) dripped (c) removing (d) dropping (e) generating

98. (a) multiplied (b) concerning (c) disappeared (d) certain (e) vanish

99. (a) proposed (b) recommending (c) implying (d) expresses (e) suggest

100. (a) decline (b) deteriorate (c) rejection (d) lessen (e) reduced

Solutions

REASONING ABILITY

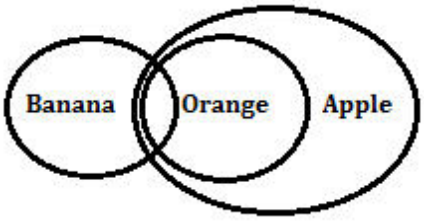
Solutions (1-5):

Designation	Persons
Chairman	F
CFO	A
GM	B
DGM	C
AGM	G
Manager	D
Junior manager	H
Clerk	E

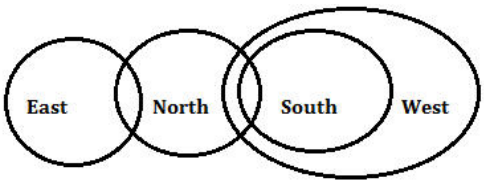
1. (b) **2. (d)** **3. (c)**

4. (a) **5. (c)**

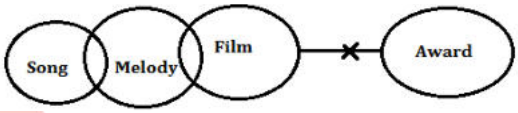
6. (b);



7. (d);



8. (e);

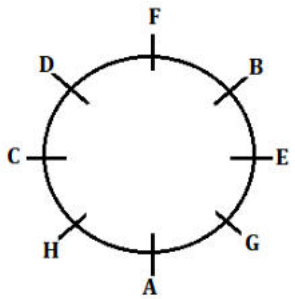


Solutions (9-12):

Word	Code
Club	Ox
Near	Ot
House/Located	Ol/gp
Both	Mt
Make	Nk
Area	Tm
View	Sq

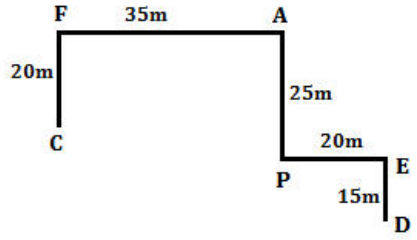
9. (c)
10. (d)
11. (a)
12. (a)

Solutions (13-17):

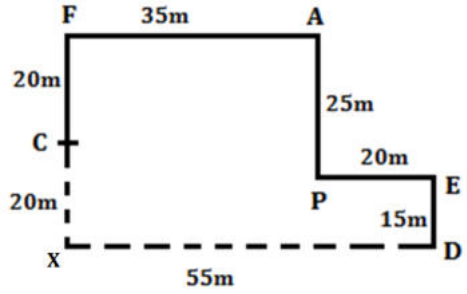


13. (b); **14. (c);** **15. (b);**
16. (d); **17. (e);**

Solutions (18-20):



18. (a);
19. (c);
20. (c);



21. (b); **22. (c);** **23. (d)**

24. (a); **25. (d);**

26. (c); 6 4 5 9 0 3 2 8 7
0 2 3 4 5 6 7 **8** 9

27. (a); Hire, Heir

Solutions (28-32):

A > E > F > B > D > G > C > H

28. (e);
29. (d);
30. (a);
31. (b);
32. (b);

33. (c); **I.** Q > S (False) **II.** S = Q (False)

34. (a); **I.** J < Q (True) **II.** L ≤ R (False)

35. (e); **I.** G > X (True) **II.** O > M(True)

Quantitative Aptitude

36. (**d**); Required average = $\frac{450+420+450}{3}$ = 440

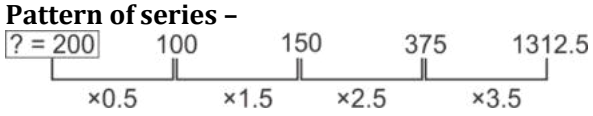
37. (**a**); Total male participated from school – B & D together = 540 + 560 = 1100
Total female participated from school – A & C together = 450 + 500 = 950
Required difference = 1100 − 950 = 150

38. (**d**); Total male participated from school – B & C together = 540 + 720 = 1260
Total female participated from school – A & D together = 450 + 450 = 900
Required % = $\frac{1260-900}{900} \times 100 = 40\%$

39. (**b**); Total students participated from school F = $\frac{140}{100} \times 650 + 420 \times \frac{32}{21}$
= 910 + 640 = 1550

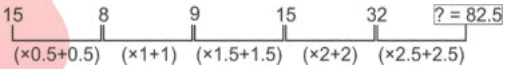
40. (**b**); Total number of male students participated from all the five schools
= (650 + 540 + 720 + 560 + 680) = 3150

41. (**b**); **Pattern of series –**

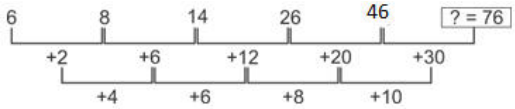


42. (**a**); **Pattern of series -**

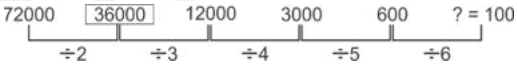
43. (**d**); **Pattern of series -**



44. (**e**); **Pattern of series -**



45. (**e**); **Pattern of series -**



46. (**d**); let total work be 360 units
Efficiency of 1 man = $\frac{360}{12\times10}$ = 3 units/day
Efficiency of 1 woman = $\frac{360}{10\times18}$ = 2 units/day
Required time = $\frac{360}{4\times3+6\times2}$ = 15 *days*

47. (**a**); distance = 240 kms
Required speed = $\frac{240}{2.5}$ = 96 *kmph*
Required % = $\frac{96-60}{60} \times 100 = 60\%$

48. (**b**); Let 10 years ago, ages of Ram and Rahim were x years and 3x years, respectively.
Then, present age of Ram = (x + 10)
and present age of Rahim = (3x + 10)
According to the question,
$\frac{x+10+5}{3x+10+5} = \frac{2}{3}$

$\Rightarrow 3x + 45 = 6x + 30$
$\Rightarrow 3x = 15$
$\therefore x = 5$
Hence, required ratio $= \frac{5+10}{3\times5+10}$
$= \frac{15}{25} = 3 : 5$

49. (b); required time $= \frac{140+120}{(132-80)\times\frac{5}{18}}$
$= \frac{260\times18}{52\times5} = 18$ sec

50. (c); let CP of book be Rs x
SP = Rs 1.2x
New CP = Rs 0.9x
New SP = Rs 1.2x + 90
ATQ, $0.9x \times \frac{140}{100} = 1.2x + 90$
1.26x = 1.2x + 90
x = Rs 1500

51. (a); **I.** x = 5
II. y = 5
So, x=y

52. (d); **I.** $x^2 + 7x - 5x - 35 = 0$
$x(x + 7) - 5(x + 7) = 0$
$(x + 7)(x - 5) = 0$
$x = -7, 5$
II. $y^2 + 7y + 8y + 56 = 0$
$y(y + 7) + 8(y + 7) = 0$
$(y + 7)(y + 8) = 0$
$y = -8, -7$
So, x≥y

53. (a) **I.** $x = \pm 9$
II. $y = \pm 8$
So, no relation can be established

54. (a); **I.** $17x^2 - 14x - 3 = 0$
$17x^2 - 17x + 3x - 3 = 0$
$17x(x - 1) + 3(x - 1) = 0$
$(17x + 3)(x - 1) = 0$
$x = -\frac{3}{17}, 1$
II. $y^2 - 2y - 35 = 0$
$y^2 - 7y + 5y - 35 = 0$
$y(y-7) + 5(y-7) = 0$
$y = 7, -5$
So, no relation can be established

55. (e); **I.** $x^2 + 9x - 5x - 45 = 0$
$x(x + 9) - 5(x + 9) = 0$
$(x - 5)(x + 9) = 0$
$x = 5, -9$
II. $y^2 - 5y - 8y + 40 = 0$
$y(y - 5) - 8(y - 5) = 0$
$(y - 5)(y - 8) = 0$
$y = 5, 8$
So, x≤y

56. (e); let initial quantity of milk & water be 5x & 3x lit respectively
ATQ, $\frac{5x+8}{3x} = \frac{11}{5}$
25x + 40 = 33x ⇒ x = 5
required difference = 5x – 3x = 2x = 10 lit

57. (a); let rate of interest be R%
ATQ, $1200 = \frac{6000\times R\times2}{100}$
R = 10%
Since compounding is done half-yearly, rate of interest = 5%
Effective rate of interest = $5 + 5 + \frac{5\times5}{100} = 10.25\%$
Required interest = $\frac{6000\times10.25\times1}{100}$ = Rs 615

58. (b); let speed of boat in still water & speed of stream be 7x & 3x kmph respectively
ATQ, $\frac{28}{7x+3x} = \frac{42}{60}$
x = 4
Required difference = $\frac{40}{7x-3x} - \frac{60}{7x+3x} = \frac{4}{x} = 1$ hour

59. (d); let amount invested by A be Rs x
Profit ratio; A : B = (x × 12) : (17000 – x) × 6 + (15500 – x) × 6
= 2x : (32500 – 2x)
ATQ, $\frac{19500}{32500-2x+2x} \times (32500 - 2x) = 8100$
32500 – 2x = 13500
x = Rs 9500
required capital of B after 6 months = 15500 – x = Rs 6000

60. (c); let length & breadth of rectangle be x & y m respectively
ATQ, 1.4xy – xy = 24
xy = 60 .....(i)
also, 2(x + y) = 32
x + y = 16 .....(ii)
from (i) & (ii)
x = 10 m, y = 6 m
breadth of rectangle = 6 m

61. (d); ? = 170 – 35
? = 135

62. (a); $(12 + 13) \times 3 = \frac{?}{5}$
? = 375

63. (c); ? = (3 × 5) × 8
? = 120

64. (b); $\left(\frac{120}{100} \times 750\right) \div ? = 25$
? = 900 ÷ 25
? = 36

65. (d); $? = (8 - 4 + 3) + \frac{6-10+7}{12}$
$? = 7\frac{1}{4}$

66. (e); $275 + \frac{64}{100} \times 750 = 750 + ?$
$275 + 480 = 750 + ?$
$? = 5$

67. (a); $? = 15 + 9 + 144$
$? = 168$

68. (c); $\frac{510}{?} = 18 + 3.25$
$? = 24$

69. (d); $\frac{12.5}{100} \times (120 + ?) = 45$
$120 + ? = 360$
$? = 240$

70. (c); $44 \times 12 - 16 = (8)^{?}$
$528 - 16 = (8)^{?}$
$? = 3$

English Language

71. (a); Reading the first paragraph of the passage it can be deduced that the correct answer is option(a). The relevant sentences of the mentioned sentences have been quoted below:
"This is why mosquitoes are considered one of the deadliest living creatures on the planet — not because they are lethal themselves, but because many of the viruses and parasites they transmit are."

72. (b); Reading the second paragraph of the passage it can be deduced that the correct answer is option(b). The sentences of the passage which substantiate this are given below:
"One such strategy involves the release into the wild of genetically modified (GM) mosquitoes that express a lethal gene — a strategy believed to have little impact on the overall DNA of wild populations of mosquitoes."

73. (e); Reading the last paragraph of the passage it can be deduced that the correct answer is option(e). The relevant sentences of the mentioned sentences have been quoted below:
"One significant worry is that a new breed of mosquito might emerge that is more difficult to control. These new genes could also potentially alter evolutionary pressures on viruses carried by mosquitoes, like dengue fever, in unpredictable ways. This includes potentially increasing their virulence or changing their host-insect interactions."

74. (e); Reading the passage carefully we can see that none of the sentences given above are factually correct hence the correct answer will be option (e).

75. (a); Reading the fourth and fifth paras of the passage it can be deduced that the correct answer is option(a). The relevant sentences of the mentioned sentences have been quoted below:
"These male GM mosquitoes have what the company describes as a "self-limiting" gene, which means that when these so-called friendly mosquitoes' mate, their offspring inherit the self-limiting gene which is supposed to prevent them surviving into adulthood In theory, when these mosquitoes are released in high numbers, a dramatic reduction in the mosquito population should follow."

76. (a); Among the given words, 'fatal' is the synonym of 'deadliest'. Hence, option (a) is the most suitable answer choice.
Fatal: causing death.
Demeaning: causing someone to lose their dignity and the respect of others.

77. (d); Reading the above passage it can be seen that the correct statements are (a) and (c). The sentences have been quoted below for your reference-
"According to research published by Oxitec researchers in 2015, field trials involving recurring releases of Friendly™ mosquitoes **demonstrated a reduction of nearly 95 per cent of target populations in Brazil**. A recent study from the Powell lab at Yale University has since confirmed that some of the offspring of the GM mosquitoes didn't succumb to the self-limiting lethal gene and survived to adulthood. **They were able to breed with native mosquitoes and thereby introduce some of their genes into the wild population."**

78. (c); Hostile means showing or feeling opposition or dislike; unfriendly. Therefore, sentence (ii) and (iii) depict the correct usage of the given word. Hence, option (c) is the most suitable answer choice.

79. (a); Vague means thinking or communicating in an unfocused or imprecise way. Therefore, only sentence (i) depicts the correct usage of the given word. Hence, option (a) is the most suitable answer choice.

80. (d); Escalate means increase rapidly. Therefore, only sentence (iii) depicts the correct usage of the given word. Hence, option (d) is the most suitable answer choice.

81. (c); As we go through the analysis of the sentence, we find that the sentence of option (c) is correct.
(a) replace 'among' with 'between'. Among is used for a greater number.
(b) replace 'case' with 'cases'.
(d) replace' manufacture' with 'manufacturing'.

82. (b); As we go through the analysis of the sentence, we find that the sentence of option (b) is correct.
(a) replace 'rename' with 'renamed'.
(c) replace 'with' with 'for'.
(d) replace 'regulate' with 'regulating'.

83. (d); As we go through the analysis of the sentence, we find that the sentence of option (d) is correct.
(a) replace 'as' with 'for'.
(b) replace 'to' with 'in'.
(c) replace 'there' with 'their'.

84. (e); As we go through the sentences, we find that all sentences are incorrect.
(a) replace 'have' with 'has'.
(b) replace 'resigns' with 'resigned'.
(c) replace 'drink' with 'drank'.
(d) replace 'isn't' with 'aren't'.

85. (a); As we go through the analysis of the sentence, we find that the sentence in option (a) is correct.
(b) replace 'uses' with 'use'.
(c) interchange 'have' with 'you' to maintain the interrogative form of the sentence.
(d) replace 'nothing' with 'anything' because 'barely' will not take 'nothing' after it.

86. (a); Except "balenced" which is spelt as "balanced" all other words are correctly spelt so our answer choice will be option (a).

87. (a) ; Except "pripared" which is spelt as "prepared" all other words are correctly spelt so our answer choice will be option (a).

88. (d); Except "footbal" which is spelt as "football" all other words are correctly spelt so our answer choice will be option (d).

89. (a); Except "looking over" which is grammatically wrong all other words are correctly spelt and are grammatically flawless so our answer choice will be option (a). Replace "looking over" with "look over".

90. (c); Except "fall of" which is spelt as "fall off" all other words are correctly spelt so our answer choice will be option (c).

91. (c); The correct rearrangement of the parts of statement will be "ACBD" which will make a grammatically correct and contextually meaningful statement. Hence, option (c) is the most suitable answer choice. The correct statement thus formed will be:
"The merger of Bharti Infratel and Indus Towers will create the world's second largest tower company."

92. (b); The correct rearrangement of the parts of statement will be "BDCA" which will make a grammatically correct and contextually meaningful statement. Hence, option (b) is the most suitable answer choice. The correct statement thus formed will be:
"The long-awaited trade agreement appears to be off the table during US President Donald Trump's upcoming visit to India."

93. (e); In the given sentence the sentence elaborates on allegations made against the government by leaders of railway employee organisations with respect to their stand on handing over railway infrastructure to private companies. Hence, option (e) is the most suitable answer choice which means the sentence requires no rearrangement. The statement thus formed will be:
"Leaders of the Railway Employees Organization alleged that the government wants to hand over the rail infrastructure to the private operators for financial benefit."

94. (b); The correct rearrangement of the parts of statement will be "ABDC" which will make a grammatically correct and contextually meaningful statement. The given statement talks about India not being granted the permission to send an aircraft carrying medical supplies to the coronavirus hit Wuhan region. The correct statement thus formed will be:
"China has not yet given India the go-ahead to send an aircraft with medical supplies to coronavirus hit Wuhan."

95. (d); The correct rearrangement of the parts of statement will be "BACD" which will make a grammatically correct and contextually meaningful statement. The given sentence talks about migration in animals with changing seasons in search of their basic needs. Hence, option (d) is the most suitable answer choice. The correct statement thus formed will be:
"With a change in season, many mammals and birds move from one country to another in search of food and shelter, and for breeding."

96. (b); The given paragraph is describing the alarming situation of Bumblebees where their numbers are continuously declining. Thus, the most suitable word for the given blank is "trouble". Hence, option (b) is the correct answer choice.

97. (d); The given paragraph is describing the alarming situation of Bumblebees where their numbers are continuously declining. Thus, the most suitable word for the given blank is "dropping". All the other words are contextually incorrect. Hence, option (d) is the correct answer choice.

98. (c); The given paragraph is describing the alarming situation of Bumblebees where their numbers are continuously declining. Thus, the most suitable word for the given blank is "disappeared". All the other words are either grammatically or contextually incorrect. Hence, option (c) is the correct answer choice.

Disappeared means cease to exist or be in use.
Vanish means disappear suddenly and completely.
Certain means able to be firmly relied on to happen or be the case.

99. (e); The most suitable word for the given blank is "suggest". All the other words are either grammatically or contextually incorrect. Hence, option (e) is the correct answer choice.

100. (a); The given paragraph is describing the alarming situation of Bumblebees where their numbers are continuously declining. Thus, the most suitable word for the given blank is "decline". All the other words are either grammatically or contextually incorrect. Hence, option (a) is the correct answer choice.

adda247

ENGLISH LANGUAGE

Directions (1-4): In each of the questions given below a sentence is given with three words in bold. Choose the option which gives the correct sequence of these words to make the sentence grammatically and contextually correct.

1. The role played by human rights organisations in **documenting (A)** and questioning state **component (B)** and excesses is a necessary **functioning(C)** of civil society activism
(a) BAC (b) None of these (c) CAB
(d) BCA (e) ACB

2. The C&AG's observations in its **divisible (A)** audit report relate to the denial of States' **financial (B)** in the **share(C)** taxes pool.
(a) CBA (b) BAC (c) ACB
(d) None of these (e) BCA

3. Many countries have chosen to ignore the connection between biodiversity and well-being, and **pursuit (A)** ecological capital in **prosperity (B)** of financial **depleted (C)**.
(a) None of these (b) CAB (c) ABC
(d) BCA (e) CBA

4. Gandhi's repeated **thought (A)** on service to all human beings from all traditions of **emphasis (B)** was the **essence (C)** of his non-violent democratic theory.
(a) ABC (b) ACB (c) CAB
(d) BAC (e) None of these

Directions (5-7): Which of the phrase/ word from the options (a), (b), (c) and (d) given below each sentence should replace the phrase printed in bold letters to make the sentence grammatically correct? If the sentence is correct as it is, mark (e) i.e., "No replacement required" as the answer.

5. A truck had **assumingly collide** with a car.
(a) evidently collided
(b) consequently met
(c) virtually received
(d) tremendously mishap
(e) No replacement required

6. The politicians **makes vague promise** about tax cuts.
(a) has promises
(b) would recalled policies
(c) made vague promises
(d) should conflict promise
(e) No replacement required

7. Students feel autonomous when they are able to **willing engage** time and energy to their studies
(a) Readily devoted
(b) full assign
(c) willingly devote
(d) cooperate willingly
(e) None of these

Directions (8-12): In each of the questions given below, a sentence has been divided into FIVE parts. Rearrange the parts of the sentence to make a grammatically correct and contextually meaningful statement.

8. (A) a health bulletin released by the Delhi government
(B) in the Capital in the past 24 hours taking
(C) as many as 3,227 new COVID-19 cases were reported
(D) the total number of cases
(E) to 2,76,325, according to
(a) EACDB
(b) CBDEA
(c) No rearrangement required
(d) BDCEA
(e) DEABC

9. (A) The Delhi High Court allowed
(B) the CBI and ED's appeal
(C) former Telecom Minister A. Raja and others
(D) for an early hearing on its leave to appeal
(E) against the 2G case verdict acquitting
(a) ABDEC (b) CBDAE (c) DABEC
(d) BDECA (e) No rearrangement required

10. (A) intensify their agitation from October 1,
(B) which will include an indefinite "rail roko"
(C) protest and the social boycott of political leaders
(D) farmer outfits announced
(E) that they would
(a) No rearrangement required
(b) CBDAE
(c) DEABC
(d) BDECA
(e) ACDBE

11. (A) Maharashtra Governor issued a notification that
(B) will enable tribal and other traditional
(C) forest dwelling families to
(D) build houses in the
(E) neighbourhood forest areas.
(a) ACDBE (b) CBDEA (c) DAEBC
(d) BEDCA (e) No rearrangement required

12. (A) of the failure of due process
(b) the controversies surrounding
(c) the reality that the
(d) movement itself is a result
(e) 'Me Too' are complicated by
(a) ACDBE (b) CBDEA (c) DAEBC
(d) BECDA (e) No rearrangement required

Directions (13-20): Read the following passage carefully and answer the questions given below it. Certain words have been printed in bold to help you locate them, while answering some of the questions. (RC was based on education and technology-ibps po pre shift 1 2020)

Although many people like to rely on traditional methods of teaching, the possibilities that open when technology is brought into the classroom are endless. For one, access to education has been significantly broadened as a result, including a wide range of learning styles and degree options. Even if you are not a student or an education professional, it is crucial to note the importance of technology in education.

To really utilize these tools, teachers should ask themselves why students want technology in the classroom, not just why they need it. ***It can definitely help education professionals in the monitoring of individual development and innovative lesson planning; but the students who learn through technology can create a set of skills that will help them throughout their own future careers.***

Technology simplifies access to educational resources. Since students already rely on technology in their everyday lives, why not integrate it into the classroom? Children today **frequently** use their smartphones and tablets outside of school hours, and should be trusted with the responsibility during school as well. Many believe that it actually helps students stay engaged during class by using a familiar tool for academic learning.

By incorporating modern technology like artificial intelligence, for instance, teachers can develop more creative and innovative lesson plans to hold the attention of their classes. Not to mention, as new methods of teaching develop, so does the need for specialized professionals both within and outside of the education field.

Many believe that technology can enhance individual learning, removing educational boundaries that teachers may face. It enables online education, distance learning, and access to up-to-date information. Because each student interprets this information differently, technology can enable more research into subjects that are more difficult to learn. They can learn at their own pace.

Thus, Educational Technology is a systematic approach to the processes and resources of teaching, educational technology, or EdTech, utilizes technology to improve the performance of students.

It identifies the needs of individuals, adapting technology to classroom instruction and in the tracking of student development. It requires teachers to accurately reveal the needs of students in order to determine the relevant technology to apply to the curriculum and to track the results to determine the effectiveness of the measures. Educational technology is a fairly new field in the education sector, and not all teachers are ready to start implementing such technologically-driven plans.

However, the cost of education has significantly reduced, with options like online degrees and by **eliminating** the need to buy physical textbooks. By accessing scholarly articles from your university's database, for example, you can easily choose to continue your studies from another country or without leaving your home. Students don't even need to enroll in a full degree program to learn from the best universities in the world. Typically, free for students, most academic journals will offer full digital versions of books originally produced in print. Even if you are not currently studying or involved in the education community, various articles, videos, etc., can be downloaded right to your phone, making the learning process both easily accessible as well as mobile.

Because of technology, education is becoming more flexible and accessible. We have seen a growing popularity of online degrees and mobile learning, physical boundaries have been removed, and many executives have embraced technology to supplement the further education of their employees.

13. Why do students need technology in the classroom?
(I) It helps students prepare for their future careers
(II) Technology helps the students to simultaneously perform many activities.
(III) Technological goods help students stay engaged during class.
(a) Only (i)
(b) Both (i) and (ii)
(c) Both (i) and (iii)
(d) Only (iii)
(e) None of these

14. How does technology aid specialized professionals?
(a) Specialized professionals can tap opportunities within and outside education field
(b) teachers can develop more creative and innovative lesson plans
(c) They can conveniently follow the conventional methods
(d) Both (a) and (b)
(e) All (a) (b) and (c)

15. How does technology benefit students in their learning?
(a) they gain access to up-to-date information
(b) Students can learn at their own pace
(c) They can further research the subjects that are difficult to learn.
(d) They can access the lessons from any part of the world.
(e) All of these

16. What could be the barrier while implementing educational technology?
(a) Teachers could be more hesitant while adapting technologically driven plan
(b) Most of the students cannot afford technological goods
(c) Parents are dubious while selecting technological plans
(d) Technology has several ill effects on the mental and physical health of the students
(e) None of these

17. How does technology help to reduce the cost of learning?
(I) Removal of physical textbooks
(II) Removal of transportation charges
(II) Most of the academic journals are free for students
(a) Only (i)
(b) Both (i) and (ii)
(c) Both (i) and (iii)
(d) Only (iii)
(e) All of these

18. According to the author what could be the inference of the sentence italicized in the given passage?
(a) EdTech is merely to increase the reach to the students.
(b) Specialized professionals can mark their presence outside the education field
(c) Technology aids students to achieve their goals
(d) Technology should be an integral part of learning process
(e) Both (a) and (b)

19. Among the given options, choose the word which can replace the highlighted word in the given passage.
REQUENTLY
(a) repeating (b) regularly (c) habit
(d) casually (e) occasionally

20. Among the given options, choose the word with the most similar meaning of the given word.
ELIMINATING
(a) accomplish (b) adaptive (c) removal
(d) regulating (e) introducing

Directions (21-26): Given below is a paragraph that has blank spaces. Corresponding to each blank, five options are given, out of which only one is appropriate. Choose the option that fits most suitably in the given blank making sentence grammatically and contextually correct.

Gaseous refinery _____**(21)** include hydrogen, fuel gas, ethane, propane, and butane. Most of the hydrogen is _____**(22)** in refinery desulfurization facilities, which remove hydrogen sulfide from the gas stream and then separate that compound into elemental hydrogen and sulfur; small quantities of the hydrogen may be delivered to the refinery fuel system. Refinery fuel gas varies in composition but usually contains a _____**(23)** amount of methane; it has a heating value similar to natural gas and is consumed in plant operations. The drawback is that periodic variability in heating value makes it _____**(24)** for delivery to consumer gas systems. Ethane may be _____**(25)** from the refinery fuel system for use as a petrochemical feedstock. In many cases, these operations take place in relatively remote regions and affect only those employed by the industry, so that little or no _____**(26)** is attempted.

21. (a) products (b) services (c) ideas
(d) form (e) brand

22. (a) enhanced (b) consumed (c) manufactured
(d) presented (e) displayed

23. (a) terrible (b) versatile (c) importance
(d) significant (e) majorly

24. (a) unsuitable (b) acceptable (c) satisfying
(d) appropriate (e) improperly

25. (a) exhausted (b) worn out (c) recovered
(d) consumed (e) depleted

26. (a) regulations (b) policies (c) authorities
(d) control (e) incitement

Directions (27-30): There are three sentences given in each question. Find the sentence(s) which is/are grammatically correct and mark your answer choosing the best possible alternative among the five options given below each question. If all the sentences are correct, choose (e) as your answer.

27. (i) The recent burglary came as a surprise for the raided home is located in a relatively safe area.
(ii) Furniture makers often use plain woven burlap as a support of the inside of couches and chairs.
(iii) Rescuers were forced to abandon their search.
(a) Only (i) (b) Only (ii) (c) Only (iii)
(d) Both (i) and (ii) (e) All are correct

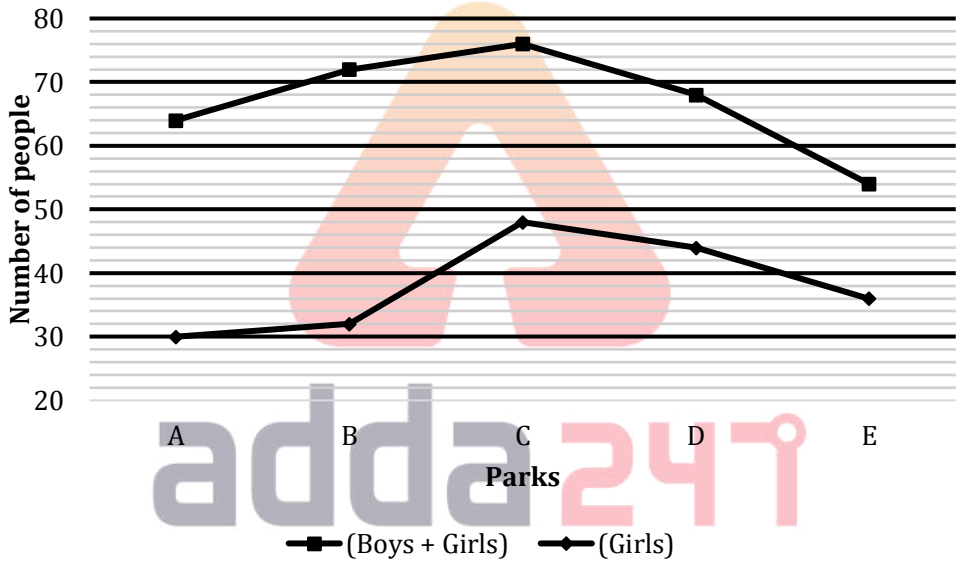
28. (i) His views have excited a lively controversy among fellow scientists.
(ii) Either party have the right to terminate the agreement.
(iii) I am assuming that the present situation is going to continue.
(a) Only (i) (b) Only (ii) (c) Only (iii)
(d) Both (i) and (iii) (e) All are correct

29. (i) Praise always stimulates him to make greater efforts.
(ii) The houses were not considered habitable.
(iii) They tried to assure him of their willingness to work.
(a) Only (i) (b) Only (ii) (c) Only (iii)
(d) Both (i) and (iii) (e) All are correct

30. (i) The issue of animal experimentation is an emotive subject.
(ii) The King agreed for dissolve the present commission.
(iii) She has endowed with intelligence as well as beauty.
(a) Only (i) (b) Only (ii) (c) Only (iii)
(d) Both (i) and (iii) (e) All are correct

QUANTITATIVE APTITUDE

Direction (31 – 35): The Line graph shows the number of people (Boys + girls) visited five (A, B, C, D & E) different parks and the number of girls visited out of total people visited these five parks. Read the data carefully and answer the questions.



31. Find total number of boys visited in park A, B & C together?
(a) 104 (b) 102 (c) 106
(d) 108 (e) 96

32. If total number of people visited in park F are 18 more than total number of people visited in park C and D together and out of total people visited in park F, $\frac{4}{9}$th are girls, then find number of boys visited in park F?
(a) 90 (b) 92 (c) 96
(d) 84 (e) 102

33. What percent of girls visited in park A with respect to the total number of people (Boys + Girls) visited that park (approximately)?
(a) 41% (b) 43% (c) 47%
(d) 49% (e) 51%

34. If park E charge Rs. 24 for each people (Boys + Girls) who visited the park, then find the total revenue get by park E?
(a) 1166 Rs. (b) 1296 Rs. (c) 1248 Rs.
(d) 1268 Rs. (e) 1284 Rs.

35. Total people (Boys + Girls) who visited park B is what percent more than total people (Boys + Girls) who visited park E (Approximate)?
(a) 25% (b) 39% (c) 43%
(d) 33% (e) 66%

Direction (36 – 40): What will come in the place of question mark in following number series:

36. 9.8, ?, 8.9, 11.6, 8, 12.5
(a) 10.7 (b) 11.7 (c) 10.5
(d) 10.9 (e) 11.3

37. 400, 274, 209, 181, 172, ?
(a) 169 (b) 173 (c) 168
(d) 171 (e) 170

38. 1, 1, ?, 15, 105, 945
(a) 2 (b) 3 (c) 4
(d) 1.5 (e) 2.5

39. 12, ?, 6, 9, 18, 45
(a) 15 (b) 8 (c) 6
(d) 12 (e) 4

40. 34, 18, 10, 6, ?, 3
(a) 9 (b) 4 (c) 3
(d) 2 (e) 6

41. A man invested a sum at a certain rate of interest on simple interest and he got 60% more amount after eight year. If he invests Rs. 9600 at the same rate of interest on SI, then find the total interest he would get after four years?
(a) 3840 Rs. (b) 2880 Rs. (c) 2520 Rs.
(d) 2160 Rs. (e) 2260 Rs.

42. A is 40% more efficient than B and both together can complete a work in $9\frac{3}{8}$ days. If A work for first five days alone and remaining work complete by B, then find in how many days total work will be competed?
(a) $20\frac{1}{2}$ days (b) 16 days (c) $15\frac{1}{5}$ days
(d) 20 days (e) $18\frac{1}{5}$ days

43. Train 'A' running at speed of 54 km/hr crosses a platform of length same as that of the train in 36 sec. If train B, which is 230 meters long crosses the same platform in 25 sec, then find speed of train B (in km/hr)?
(a) 54 km/hr (b) 72 km/hr (c) 84 km/hr
(d) 90 km/hr (e) 108 km/hr

44. Four years ago, ratio of age of A and B was 3 : 4. Average of present age of A, B and C is 26 years. C is 11 years younger than B. what is the present age of B?
(a) 25 years (b) 21 years (c) 22 years
(d) 32 years (e) 26 years

45. A man deposit 10% of his salary in PF. He saves 30% of the remaining. The ratio of his expense on medicine and groceries is 3 :4 of the remaining salary after saving. If his expense on the medicine was Rs 2700. Find the monthly salary.
(a) Rs 10,000 (b) Rs 15,000 (c) Rs 30,000
(d) Rs 20,000 (e) None of these

46. In a mixture of milk and water, the proportion of milk by weight is 60%. If from the 80 gm mixture, 20 gm of mixture is taken out and 6 gm of pure water is added to the mixture then find the ratio of milk and water in the new mixture.
(a) 5 : 6 (b) 6 : 5 (c) 4 : 3
(d) 3 : 2 (e) 7 : 6

47. A sphere is melted and molded into solid cylinder. If radius of both solids is equal, then find the ratio of total surface area of sphere to the total surface area of cylinder
(a) 2 : 3 (b) 4 : 3 (c) 3 : 7
(d) 6 : 7 (e) 7 : 6

48. Three partners P, Q and R invested their amounts in ratio of 2 : 5 : 7. At the end of 6 months, 'P' added some more amount such that his investment become equals to half of sum of 'Q' and 'R' initial investment. If at the end of the year, Q's share in profit is Rs 425, then find the total profit
(a) Rs 1250 (b) Rs 1360 (c) Rs 1840
(d) Rs 1050 (e) Rs 1450

49. A shopkeeper marks up price of LED 60% above its cost price and gives three successive discounts of $12\frac{1}{2}$ %, d% and 25%. If shopkeeper made a loss 16% on LED. Find the second discount allowed by shop?
(a) 15% (b) 20% (c) 25%
(d) 16 ⅔% (e) 17.5%

50. Speed of a boat in still water is 12 kmph and speed of stream is 'x' kmph. If in traveling 270 km upstream boat takes $66\frac{2}{3}$% more time than traveling 270 km downstream, then find the value of 'x'.
(a) 2 kmph (b) 4 kmph (c) 1 kmph
(d) 3 kmph (e) 6 kmph

Directions (51-55): In the following two equations questions numbered (I) and (II) are given. You have to solve both equations and Give answer
(a) If x > y
(b) If x ≥ y
(c) If y > x
(d) If y ≥ x
(e) If x = y or no relation can be established

51. I. $x^2 - 8x + 15 = 0$ **II.** $2y^2 - 7y + 5 = 0$

52. I. $2x^2 + x - 28 = 0$ **II.** $2y^2 - 23y + 56 = 0$

53. I. $2x^2 - 7x - 60 = 0$ **II.** $3y^2 + 13y + 4 = 0$

54. I. $x^2 - 17x - 84 = 0$ **II.** $y^2 + 4y - 117 = 0$

55. I. $x^2 = 9^2$ **II.** $(y - 8)^2 = 9$

Direction (56 – 60): Given below table shows total three types of items (A, B & C) sold by a store on five days of a week. Table also shows total type A items sold by store and percentage of items B and items C sold by store. Read the data carefully and answer following questions:
Note- only three types of items sold by the store.

Days	Items A	% of items B	% of items C
Monday	240	32%	20%
Tuesday	320	48%	12%
Wednesday	420	45%	20%
Thursday	360	56%	20%
Friday	340	22%	10%

56. Total items B sold by store on Monday & Friday together are what percent less than total items C sold by store on Wednesday & Thursday together?
(a) 60% (b) 50% (c) 20%
(d) 30% (e) 10%

57. Find the difference between average number of items B sold by store on Tuesday & Thursday and average number of items A sold by store on Thursday & Friday?
(a) 260 (b) 264 (c) 262
(d) 272 (e) 268

58. If total items B sold by store on Sunday is 25% more than that sold on Thursday and total items C sold on Sunday is 300% more than that sold on Friday, then find total number of items B & items C sold by store on Sunday ?
(a) 1250 (b) 1150 (c) 1050
(d) 950 (e) 1350

59. Total items C sold by store on Wednesday is what percent more than total items C sold by store on Monday and Tuesday together?
(a) $26\frac{22}{49}\%$ (b) $24\frac{22}{49}\%$ (c) $22\frac{22}{49}\%$
(d) $21\frac{22}{49}\%$ (e) $18\frac{22}{49}\%$

60. Find the ratio between total items sold by store on Monday to total items sold by store on Thursday?
(a) 1 : 5 (b) 1 : 3 (c) 1 : 7
(d) 1: 4 (e) 1 : 2

Direction (61 – 65): Given data shows total male and female employee in three companies in a seminar. Read data carefully and answer the questions: -

In annual seminar of three companies, A, B and C some male and female employees represent their companies. Average number of female employees who represent A and B is 420. Total male employee in A and B is 1620. Number of female employees is $\frac{2}{3}rd$ and $\frac{2}{5}th$ of male employee in A and B respectively. Total female employee who represent C are 25% more than total female employee who represent A and total male employee who represent C are $33\frac{1}{3}\%$ more than total female employee who represent B.

61. Total employees who represent A is what percent more than total male employee who represent B ?
(a) $33\frac{1}{3}\%$ (b) $30\frac{1}{3}\%$ (c) $27\frac{1}{3}\%$
(d) $29\frac{1}{3}\%$ (e) $39\frac{1}{3}\%$

62. 25% of total female employee and 20% of total male employee who represent B & C together have MBA degree, then find total employee who do not have MBA degree?
(a) 1624 (b) 1424 (c) 1824
(d) 1648 (e) 1244

63. Find the ratio between total male employee who represent B & C together to total female employee who represent A & C together?
(a) 23 : 13 (b) 23 : 14 (c) 23 : 18
(d) 23 : 12 (e) 23 : 20

64. Find difference between Total male employees who represent C and total female employee who represent B?
(a) 120 (b) 140 (c) 100
(d) 160 (e) 180

65. Find average number female in B & C ?
(a) 480 (b) 420 (c) 520
(d) 540 (e) 600

REASONING ABILITY

Direction (66-70): Study the following information carefully and answer the questions given below:

Twelve students stand in two rows with six students standing in each row. Students in row 1 are facing north direction and students in row 2 are facing south direction. Each student in row 1 faces a student in row 2.

P who stands in row 2 stands second to the right of T. L faces K. Two students stand between K and A who is at one of the extreme ends. G faces the immediate neighbor of V. Only one person stands between V and L. Three students stand between F and W. F faces immediate neighbor of P. K is second to the left of W. W does not face V. R stands to immediate right of S. R and S do not face A. Q stands in same row as K.

66. How many students stand between P and S?
(a) None (b) One (c) Two
(d) More than three (e) Three

67. If P is related to F, G is related to V then in same manner L is related to ____?
(a) W (b) Q (c) A
(d) R (e) K

68. Who among the following faces the one who stand second to the right of S?
(a) The one, who sits third right of F.
(b) The one, who sits immediate left of W.
(c) A
(d) W
(e) The one, who sits immediate right of G.

69. Four of the following five are alike in a certain way and hence form a group which of the following does not belong to the group?
(a) S-Q (b) L-G (c) A-V
(d) T-G (e) K-R

70. Which of the following is not true regarding Q?
(a) Q stands second to the right of G
(b) Q faces R
(c) Q faces immediate neighbor of T
(d) Two students stand between Q and F
(e) All are true

Direction (71-75): Study the following information carefully and answer the questions given below:
In a certain code language:
"work is worship" is coded as "jk rt pq"
"work hard always" is coded as "jk mn uv"
"always do worship" is coded as "uv st pq"
"hard time passes" is coded as "mn ab ef"

71. What is the code of "time passes" as per the given code language?
(a) ab uv
(b) ef jk
(c) Cannot be determined
(d) ab ef
(e) ef rt

72. What is the code of "worship" as per the given code language?
(a) pq (b) ab (c) mn
(d) ef (e) None of these

73. Which among the following words is coded as "rt"?
(a) work (b) is (c) hard
(d) time (e) None of these

74. Which among the following words is coded as "ab"?
(a) time (b) passes (c) is
(d) Can't be determined (e) None of these

75. Which of the following words is correctly matched with its code?
(a) work- rt (b) is- jk (c) worship-mn
(d) do- rt (e) hard-mn

Direction (76-80): Study the following information carefully and answer the questions given below:

Seven persons A, B, C, D, E, F and G sits consecutive in vertical row. Each person likes different fruits i.e. Grapes, Litchi, Guava, Orange, Banana, Kiwi and Apple. All the information is not necessarily in the same order.

Two persons sits between B and the one, who likes Litchi. A sits immediate above the one, who likes Litchi. B likes Kiwi. More than four persons sits between G and F, who likes Grapes. F sits at the bottommost position. A likes Guava and sits below G but not immediately below. D, who likes Orange sits below the one, who likes Banana and above C. G does not like Banana.

76. Who among the following person likes Apple?
(a) G (b) C (c) E
(d) None of these (e) The one, who sits just below C

77. Which among the following statement is true regarding E?
(a) E likes Banana
(b) Two persons sit between E and A
(c) G sits immediately above E
(d) More than three persons sit below E
(e) All are true

78. Four of the following five belongs to a group in a certain way, find the one which does not belong to that group?
(a) G-Kiwi (b) E-Orange (c) D-Grapes
(d) B-Guava (e) A-Grapes

79. How many persons sit between A and the one, who likes Apple?
(a) Four (b) Three (c) Five
(d) Two (e) None of these

80. What is the position of D?
(a) Second from the topmost position
(b) Second from the bottommost position
(c) Fourth from the topmost position
(d) Both (c) and (d)
(e) Third from the bottommost position

Direction (81-84): In each of the questions below are given some statements followed by two conclusions. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

81. Statements: Some circles are not triangle.
Only a few squares are triangle.
No rhombus is squares.
Conclusions: **I.** All rhombus being triangle is a possibility.
II. Some squares can never be circles.
(a) If only conclusion I follows.
(b) If only conclusion II follows.
(c) If either conclusion I or II follows.
(d) If neither conclusion I nor II follows.
(e) If both conclusions I and II follow.

82. Statements: Only summer is hot.
Only a few summer is rainy.
Some winter is rainy.
Conclusions: **I.** All hot can be winter.
II. Some rainy is not summer.
(a) If only conclusion I follows.
(b) If only conclusion II follows.
(c) If either conclusion I or II follows.
(d) If neither conclusion I nor II follows.
(e) If both conclusions I and II follow.

83. Statements: All bus is train.
Only a few bikes are train.
Some bikes is not car.
Conclusions: I. All bus being car is a possibility.
II. No bus is bikes.
(a) If only conclusion I follows.
(b) If only conclusion II follows.
(c) If either conclusion I or II follows.
(d) If neither conclusion I nor II follows.
(e) If both conclusions I and II follow.

84. Statements: No chocolates are biscuits.
Only a few biscuits are chips.
Some chips are juices.
Conclusions: I. Some biscuits are juices.
II. No biscuits are juices.
(a) If only conclusion I follows.
(b) If only conclusion II follows.
(c) If either conclusion I or II follows.
(d) If neither conclusion I nor II follows.
(e) If both conclusions I and II follow.

Directions (85-89): Study the information carefully and answer the questions given below.

Six persons are going to the six different cities on two different dates i.e. 7th and 16th of three different months i.e. March, April and May of the same year.

B goes in the month which has an odd number of days and on odd number date. Two persons go in between B and the one who goes to Pune. Only two persons go after the one who goes to Varanasi. A goes to Delhi on an odd-numbered date. Only one person goes between A and F. As many people who go before F, as many people go after C. More than two persons go in between D and the E who goes to Indore. F does not go to Chennai. One of the persons visits Jaipur.

85. Who among the following goes on 16th March?
(a) The one who goes to Jaipur (b) A (c) F
(d) The one who goes to Pune (e) None of these

86. The one who goes on 7th May, goes to which city?
(a) Jaipur (b) Chennai (c) Indore
(d) Pune (e) None of these

87. Which of the following statement is not true about E?
(a) B goes just before E
(b) E goes to Pune
(c) Only two persons go between E and F
(d) More than one person goes between E and D
(e) Both (b) and (d)

88. Which of the combination is true?
(a) D-7th March (b) B- Jaipur (c) C- 16th April
(d) D- Varanasi (e) None of these

89. Who among the following person goes to Varanasi?
(a) D (b) C (c) F
(d) B (e) None of these

Directions (90-92): In these questions, relationships between different elements are shown in the statements. These statements are followed by two conclusions. Give answer
(a) if only conclusion I is true
(b) if only conclusion II is true
(c) if either conclusion I or conclusion II is true
(d) if neither conclusion I nor conclusion II is true
(e) if both conclusions I and II are true

90. Statement: D>G≤H=J; J>F≥L; K=L
Conclusions: **I.** H>F **II.** K≤G

91. Statement: V<Q≤R; W=R>M; W>P≥X
Conclusions: **I.** P>Q **II.** Q≥X

92. Statement: W>S=Q; S≤N=O≥Y
Conclusions: **I.** Q≤N **II.** W≥O

93. How many such pairs of digits are there in the given number '**73951286**' each of which has as many digits between them in the number as in the Number series (From both backward and forward)?
(a) Two (b) One (c) Four
(d) Three (e) More than four

94. If vowels are arranged in alphabetical increasing order from left to right and then consonants are arranged in alphabetical increasing order from left to right in the given word '**ALONGSIDE**'. Then which letter is 4th from the left side in the new word?
(a) A (b) I (c) S
(d) O (e) None of these

Direction (95-99): Study the following information carefully and answer the questions given below:

A certain number of persons sit in a linear row. All of them faces in the north direction. P sits third to the right of S. Only three persons sit between P and Q. U sits third to the left of Q. U sits fifth from the left end of the row. R sits third to the left of U. Only three persons sit between W and T who is an immediate neighbor of R. Only six persons sits to the right of W. M sits immediate left of O. Only three person sits between M and H. O does not sit left of P. H does not sit at the extreme end of the row.

95. How many persons sit in the row?
(a) Eleven (b) Thirteen (c) Fourteen
(d) Ten (e) Twelve

96. How many persons sit to the left of S?
(a) R (b) T (c) H
(d) W (e) None

97. How many persons sit between U and S?
(a) One (b) Two (c) None
(d) Three (e) More than three

98. Four of the following five are alike in a certain way and hence form a group which of the following does not belong to the group?
(a) S (b) U (c) M
(d) T (e) W

99. Who among the following person sit exactly between R and Q?
(a) T (b) M (c) P
(d) H (e) U

100. In a family of three generations there are six family members i.e. P, Q, R, S, T, and U. U is the Son in law of P. Q is the brother in law of S who has no siblings. S is the only child of R. R is married to P. T is niece of Q. How P is related to T?
(a) Maternal Grandfather
(b) Maternal Grandmother
(c) Father
(d) Mother
(e) Cannot be determined

Solutions

ENGLISH LANGUAGE

1. (e): ACB is the correct sequence.
The role played by human rights organisations in documenting and questioning state functioning and excesses is a necessary component of civil society activism

2. (e): BCA is the correct sequence.
The C&AG's observations in its financial audit report relate to the denial of States' share in the divisible taxes pool.

3. (b): CAB is the correct sequence
Many countries have chosen to ignore the connection between biodiversity and well-being, and depleted ecological capital in pursuit of financial prosperity.

4. (d): **BAC** is the correct sequence.
Gandhi's repeated emphasis on service to all human beings from all traditions of thought was the essence of his non-violent democratic theory.

5. (a): The correct phrase to replace the incorrect phrase is "evidently collide". 'Collide' means hit by accident when moving. Since the sentence is in past perfect form, 'collided' should be used. All the other given options are either grammatically incorrect or contextually meaningless.

6. (c): The correct phrase to replace the incorrect phrase is "made vague promises". All the other given options are either grammatically incorrect or contextually meaningless.

7. (c): Option (c) is the correct choice.
Students feel autonomous when they are able to willingly devote time and energy to their studies

8. (b): Going through the given parts of the sentence it can be seen that given sentence is talking about the increase in the number of cases of COVID-19 in the capital. So, on the basis of this it can be seen that the correct arrangement would be CBDEA and the sentence thus formed is:
As many as 3,227 new COVID-19 cases were reported in the Capital in the past 24 hours taking the total number of cases to 2,76,325, according to a health bulletin released by the Delhi government.

9. (a): Given sentence is talking about the appeal made by the CBI and ED's regarding early hearing of the appeal against the 2G case verdict. So, on the basis of this information it can be seen that correct arrangement would be ABDEC and the sentence thus formed is:

The Delhi High Court allowed the CBI and ED's appeal for an early hearing on its leave to appeal against the 2G case verdict acquitting former Telecom Minister A. Raja and others.

10. (c): Given sentence is talking about the declaration of farmer outfits about intensifying their agitation. So, on the basis of this information it can be seen that correct arrangement would be DEABC and the sentence thus formed is:
Farmer outfits announced that they would intensify their agitation from October 1, which will include an indefinite "rail roko" protest and the social boycott of political leaders.

11. (e): Given sentence is correct as it is and requires no rearrangement. So, the correct answer choice is option (e).

12. (d): Given sentence is talking about the controversy surrounding the "Me Too" campaign and how it started. So, on the basis of this information it can be seen that correct arrangement would be BECDA and the sentence thus formed is:
The controversies surrounding 'Me Too' are complicated by the reality that the movement itself is a result of the failure of due process.

13. (c): Refer to the lines "students who learn through technology can create a set of skills that will help them throughout their own future careers" and "Many believe that it actually helps students stay engaged during class by using a familiar tool for academic learning." Hence, option (c) is correct.

14. (d): Refer to the lines "By incorporating modern technology like artificial intelligence, for instance, teachers ***can develop more creative and innovative lesson plans*** to hold the attention of their classes. Not to mention, as new methods of teaching develop, ***so does the need for specialized professionals both within and outside of the education field***." Hence, option (d) is correct.

15. (e): Refer to the sentence "Many believe that technology can enhance individual learning, removing educational boundaries that teachers may face. It enables online education, distance learning, and access to up-to-date information. Because each student interprets this information differently, technology can enable more research into subjects that are more difficult to learn. They can learn at their own pace." Hence option (e) is correct.

16. (a): Refer to the sentence "Educational technology is a fairly new field in the education sector, and not all teachers are ready to start implementing such technologically-driven plans."

17. (e): Refer to the lines "However, the cost of education has significantly reduced, with options like online degrees and by ***eliminating the need to buy physical textbooks***. By accessing scholarly articles from your university's database, for example, you can easily choose ***to continue your studies from another country or without leaving your home."*** "Typically, ***free for students***, most academic journals will offer full digital versions of books originally produced in print". Hence, option (e) is correct.

18. (d): The given sentence indicates that technology can not only helps students but also the education professionals. It helps in the overall growth and development of the students and education professionals. Thus, after carefully reading the passage, it can be inferred that technology should form an integral part of education system.

19. (b): 'Frequently' means regularly or habitually; often. Thus, regularly can replace the given word in the passage.

20. (c): Eliminating means completely remove or get rid of (something). Hence, removal is the synonym of the given word.

21. (a): The most suitable word to fill the blank is "products". The phrase alongside the blank clearly mentions the products that can be classified under gaseous refinery. Hence, option (a) is the most appropriate choice.

22. (b): The most suitable word to fill the given blank is "consumed". Since the given sentence explains the process of refinery desulfurization facilities, it can be understood that hydrogen is used to carry out several procedures in the refinery. Hence, option (b) is correct.

23. (d): The most suitable for the given blank is "significant". All the other options are either grammatically incorrect or contextually meaningless.

24. (a): Since a drawback of refinery gas is mentioned in the given sentence, we can easily identify the word which is apt for the blank. Among the given words only "unsuitable" adheres to the grammar and context of the given passage. Hence, option (a) is the correct answer choice.

25. (c): The phrase alongside the blank has mentioned that ethane is used as a petrochemical feedstock, which implies that it is recovered in the refinery fuel system. Hence, option (c) i.e. "recovered" becomes the most viable answer choice.

26. (d): According to the context of the passage, the most suitable word for the given blank is "control. Hence, option (d) is the correct choice.

27. (c): Only sentence (iii) is correct.
In sentence (i), replace 'for' by 'since'.
In sentence (ii) replace 'of' by 'for'.

28. (d): Both the sentence (i) and (iii) are correct.
In Sentence (ii) 'have' should be replaced by 'has'.

29. (e): All the given sentences are correct.

30. (a): Sentence (i) is correct.
In sentence (ii) 'for' should be replaced by 'to'.
In sentence (iii) 'has' should be replaced by 'is'.

QUANTITATIVE APTITUDE

31. (b): Required sum = (64 – 30) + (72 – 32) + (76 – 48)
= 34 + 40 + 28 = 102

32. (a): Total people visited in park F
= (76 + 68) + 18 = 162
So, number of boys visited in park F
$= 162 \times \frac{5}{9} = 90$

33. (c): Required percentage
$= \frac{30}{64} \times 100 = 46.875 \approx 47\%$

34. (b): Required revenue = 24 × 54 = 1296 Rs.

35. (d): Required percentage = $\frac{72-54}{54} \times 100$
$= \frac{18}{54} \times 100 = 33\frac{1}{3}\% \approx 33\%$

36. (a): Pattern of series –
?= 9 .8 + 0.9 = **10.7**
10.7 − 1.8 = 8.9
8.9 + 2.7 = 11.6
11.6 - 3.6 = 8
8 + 4.5 = 12.5

37. (e): Pattern of series –
400 – (5^3 + 1) = 274
274 − (4^3 + 1) = 209
209 − (3^3 + 1) = 181
181 – (2^3 + 1) = 172
?= 172 – (1^3 + 1) **= 170**

38. (b): Pattern of series –
1 × 1 = 1
? = 1 × 3 = **3**
3 × 5 = 15
15 × 7 = 105
105 × 9 = 945

39. (c): Pattern of series –
12 × 0.5 = 6
6 × 1 = 6
6 × 1.5 = 9
9 × 2 = 18
18 × 2.5 = 45

40. (b): Pattern of series –
34 ÷ 2 + 1 = 18
18 ÷ 2 + 1 = 10
10 ÷ 2 + 1 = 6
? = 6 ÷ 2 + 1 = **4**
4 ÷ 2 + 1 = 3

41. (b): Let sum invested by man = 100x
And amount he got = $100x \times \frac{160}{100} = 160x$
Let rate of interest be 'r' % p.a.
ATQ –
$100x \times r \times \frac{8}{100} = 160x - 100x$
r = 7.5
Required interest = $9600 \times 7.5 \times \frac{4}{100} = 2880$ Rs.

42. (a): Let efficiency of B = 5x unit/day
So, efficiency of A = $5x \times \frac{140}{100} = 7x$ unit/day
Total work = $(7x + 5x) \times \frac{75}{8} = \frac{225x}{2}$ unit
Total work done by A in 5 days = 7x × 5 = 35x unit
Total required days = $5 + \frac{\frac{225x}{2} - 35x}{5x} = 20\frac{1}{2}$ days

43. (b): Let length of train 'A' and platform each be 'L' meters
ATQ –
$\frac{L+L}{36} = 54 \times \frac{5}{18}$
L = 270 meters
Let speed of train B be 's' km/hr
$\frac{230+270}{25} = s \times \frac{5}{18}$
S = 72 km/hr

44. (d): Let present age of A, B and C be x, y and z years respectively.
ATQ,
$\Rightarrow \frac{x-4}{y-4} = \frac{3}{4}$
$4x - 3y = 4$ ……(i)
$\Rightarrow x + y + z = 26 \times 3 = 78$ ……(ii)
$\Rightarrow z = y - 11$ ……(iii)

From (i), (ii) and (iii)
$x = 25, y = 32, z = 21$
So, present age of B = y = 32 years

45. (a): Let monthly salary = Rs 100x
ATQ
$100x \times \frac{90}{100} \times \frac{70}{100} = 63x$
Let total expense on medicine and groceries = $3y + 4y = 7y$
So, $7y = 63x$
$y = 9x$
Given, 3y = 2700,
So, y = 900
Now, $x = 100$
∴ monthly salary of the man = 100x = Rs 10,000

46. (b): Ratio of Milk and water in mixture = 60 : 40 = 3 : 2
Quantity of Milk left in mixture after 20 gm of mixture is taken out
$= 60 \times \frac{3}{5} = 36$ gm.
Quantity of water left = $60 \times \frac{2}{5} = 24$ gm
∴ Required ratio = $\frac{36}{24+6} = 6 : 5$

47. (d): Let radius of sphere and cylinder is 'r'.
So, volume of sphere = $\frac{4}{3}\pi r^3$
Volume of cylinder =Volume of sphere
$\frac{4}{3}\pi r^3 = \pi r^2 h$
$h = \frac{4}{3}r$
TSA of sphere = $4\pi r^2$
TSA of cylinder = $2\pi r (r + h)$
$= 2\pi r (r + \frac{4}{3}r)$
$= \frac{14}{3}\pi r^2$
Required ratio = $\frac{4\pi r^2}{\frac{14}{3}\pi r^2} = \frac{6}{7}$
= 6 : 7

48. (b): Let investment of P, Q, R be 2x, 5x and 7x respectively.
Let extra amount added by 'P' after six months be Rs. y
ATQ,
$2x + y = \frac{1}{2}[5x + 7x]$
$2x + y = 6x$
$y = 4x$
Ratio of profit share
P : Q : R = $2x \times 6 + (4x + 2x) \times 6 : 5x \times 12 : 7x \times 12$
Q's share of profit = Rs 425
$\Rightarrow 5 \rightarrow 425$
$\Rightarrow 1 \rightarrow 85$
$\Rightarrow (4 + 5 + 7) = 16 \rightarrow 16 \times 85 = 1360$
Total profit = Rs. 1360

49. (b): Let C.P. of LED = 100x Rs.
M.P of LED = 160x Rs.
First discount = $160x \times \frac{1}{8}$
= 20x Rs.
Second and third discount
$(160x - 20x) \times \frac{(100-d)}{100} \times \frac{(100-25)}{100} = 84x$
$140x \times \frac{100-d}{100} \times \frac{3}{4} = 84x$
$21 (100 - d) = 84 \times 20$
$21d = 2100 - 1680$
$d = \frac{420}{21}$
d = 20%

50. (d): Speed of boat in still water = 12 kmph
Speed of Stream = x kmph
ATQ,
$\frac{270}{(12-x)} = \left(100 + 66\frac{2}{3}\right)\%$ of $\frac{270}{12+x}$
$\Rightarrow \frac{270}{12-x} = \left(1 + \frac{2}{3}\right) \times \frac{270}{12+x}$
$\Rightarrow \frac{270}{12-x} = \frac{5}{3} \times \frac{270}{12+x}$
$\Rightarrow (12 + x) \times 3 = 5 \times (12 - x)$
$\Rightarrow x = 3$
So, speed of stream = x = 3 kmph

51. (a): **I.** $x^2 - 8x + 15 = 0$
$x^2 - 3x - 5x + 15 = 0$
$(x - 3)(x - 5) = 0$
$x = 3, 5$
II. $2y^2 - 7y + 5 = 0$
$2y^2 - 2y - 5y + 5 = 0$
$(y - 1)(2y - 5) = 0$
$y = 1, \frac{5}{2}$
$x > y$

52. (d): **I.** $2x^2 + x - 28 = 0$
$2x^2 + 8x - 7x - 28 = 0$
$2x (x + 4) - 7 (x + 4) = 0$
$(2x - 7)(x + 4) = 0$
$x = -4, \frac{7}{2}$
II. $2y^2 - 23y + 56 = 0$
$2y^2 - 16y - 7y + 56 = 0$
$2y(y - 8) - 7(y - 8) = 0$
$(2y - 7)(y - 8) = 0$
$y = \frac{7}{2}, 8$
$y \geq x$

53. (e): **I.** $2x^2 - 7x - 60 = 0$
$2x^2 - 15x + 8x - 60 = 0$
$x (2x - 15) + 4 (2x - 15) = 0$
$(x + 4)(2x - 15) = 0$
$x = -4, \frac{15}{2}$

II. $3y^2 + 13y + 4 = 0$
$3y^2 + 12y + y + 4 = 0$
$3y(y + 4) + 1(y + 4) = 0$
$(3y + 1)(y + 4) = 0$
$y = -\frac{1}{3}, -4$
No relation between x and y

54. (e): I. $x^2 - 17x - 84 = 0$
$x^2 + 4x - 21x - 84 = 0$
$(x + 4)(x - 21) = 0$
$x = -4, 21$
II. $y^2 + 4y - 117 = 0$
$y^2 - 9y + 13y - 117 = 0$
$(y - 9)(y + 13) = 0$
$y = 9, -13$
No relation between x and y

55. (c): I. $x^2 = 9^2$
$x = 9$
II. $(y - 8)^2 = 3^2$
$y = 11$
$y > x$

56. (b): Total items B sold by store on Monday and Friday together
$= \frac{240}{48} \times 32 + \frac{340}{68} \times 22$
$= 160 + 110$
$= 270$
Total items C sold by store in Wednesday & Thursday together
$= \frac{420}{35} \times 20 + \frac{360}{24} \times 20$
$= 240 + 300$
$= 540$
Required percentage $= \frac{540-270}{540} \times 100$
$= \frac{270}{540} \times 100$
$= 50\%$

57. (c): Average number of items B sold by store on Tuesday & Thursday
$= \frac{\frac{320}{40} \times 48 + \frac{360}{24} \times 56}{2}$
$= \frac{384+840}{2} = 612$
Average number of items A sold by store on Thrusday& Friday
$= \frac{360+340}{2}$
$= \frac{700}{2} = 350$
Required difference = 612 – 350 = 262

58. (a): Total items B sold by store on Sunday
$= \frac{360}{24} \times 56 \times \frac{125}{100}$
$= 1050$
Total items C sold by store on Sunday
$= \frac{340}{68} \times 10 \times \frac{400}{100}$
$= 200$
Total items B & items C sold by store on Sunday = 1050 + 200 = 1250

59. (c): Total items C sold on Wednesday $= \frac{420}{35} \times 20$
$= 240$
Total items C sold on Monday & Tuesday together
$= \frac{240}{48} \times 20 + \frac{320}{40} \times 12$
$= 100 + 96$
$= 196$
Required percentage $= \frac{240-196}{196} \times 100$
$= \frac{44}{196} \times 100$
$= 22\frac{22}{49}\%$

60. (b): Required ratio $= \frac{\frac{240}{48} \times 100}{\frac{360}{24} \times 100}$
$= \frac{500}{1500}$
$= 1 : 3$

Solutions (61 – 65): Total number of female employee who represent A and B = 420 × 2 = 840
Let, Number of male employee who represent A = a
And, Number of male employee who represent B = b
ATQ,
$a + b = 1620$ ...(i)
$\frac{2}{3}a + \frac{2}{5}b = 840$ ... (ii)
On solving (i) & (ii)
a = 720, b = 900
Number of female employees who represent A
$= \frac{2}{3} \times 720$
$= 480$
Number of female employees who represent B
$= \frac{2}{5} \times 900$
$= 360$
Total Female employee who represent C = $480 \times \frac{125}{100} = 600$
Total male employee who represent C = $360 \times \frac{4}{3} = 480$

Companies	Male	Female
A	720	480
B	900	360
C	480	600

61. (a): Total employee who represent A = 720 + 480 = 1200
Required percentage $= \frac{1200-900}{900} \times 100$
$= 33\frac{1}{3}\%$

62. (c): Total employee who represent B & C who do not have MBA degree

$= (900 + 480)\times \frac{80}{100} + (360 + 600) \times \frac{75}{100}$

$= 1104 + 720$

$= 1824$

63. (c): Required ratio $= \frac{(900+480)}{(480+600)}$

$= 23 : 18$

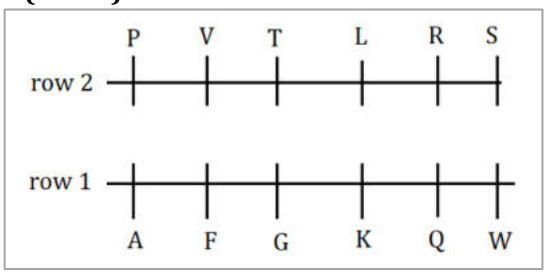
64. (a): Required difference = 480 – 360

= 120

65. (a): Required average $= \frac{360+600}{2} = 480$

REASONING ABILITY

Direction (66-70):



66. (d): **67. (b):** **68. (e)**

69. (d): **70. (c):**

Direction (71-75):

WORDS	CODES
work	jk
is	rt
worship	pq
hard	mn
always	uv
do	st
Time/passes	ab/ef

71. (d): **72. (a):** **73. (b):**

74. (d): **75. (e):**

Direction (76-80):

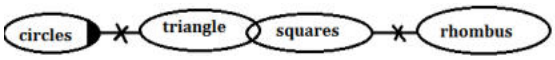
Persons	Fruits
G	Apple
E	Banana
B	Kiwi
D	Orange
A	Guava
C	Litchi
F	Grapes

76. (a): **77. (e):** **78. (c):**

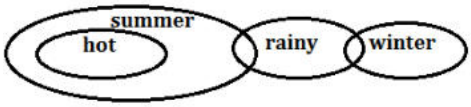
79. (b): **80. (c):**

Direction (81-84):

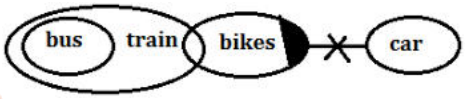
81. (a):



82. (d):



83. (a):



84. (c):

Solutions (85-89):

Date / Month	7th	16th
March	A (Delhi)	D (Pune)
April	F (Jaipur)	C (Varanasi)
May	B (Chennai)	E (Indore)

85. (d): **86. (b):** **87. (b):**

88. (c): **89. (b):**

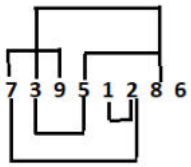
Solutions (90-92):

90. (a): **I.** H>F (True) **II.** K≤G(False)

91. (d): **I.** P>Q(False **II.** Q≥X(False)

92. (a): **I.** Q≤N (True) **II.** W≥O (False)

93. (e):

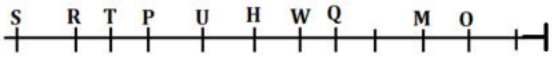


94. (d):

ALONGSIDE

AEI**O**DGLNS

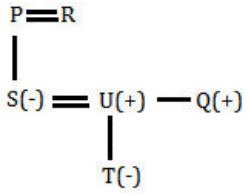
Solutions (95-99):



95. (b): **96. (e):** **97. (d):**

98. (c): **99. (e):**

100. (e):



ENGLISH LANGUAGE

Directions (1-8): Read the following passage and answer the following questions based on the given passage. Some of the words are highlighted which would help you to answer some of the questions given.

A good night's sleep is utmost essential for overall good health. It is the time when the body rests, rejuvenates and recovers. An adult requires 7 to 8 hours of peaceful and quality sleep per day. Sleep deprivation can be defined as inability to complete the **sufficient** sleep-time required by the person.

Research has shown that even one night of sleep deprivation is equivalent to being intoxicated. Intentional sleep deprivation is mostly seen in young people and teenagers who prefer entertainment over sleep. Many workaholics also consider sleeping as a waste of precious time which is not true. Many a time because of work commitments such as working in night shifts or long hours may also interfere with quality sleep that an individual requires. Medical issues such as chronic illnesses, depression and sleep disorders such as obstructive sleep apnea can also be the reason for sleep deprivation.

You probably already have some understanding of the benefits of rest—and the costs of not getting it. Sleep allows us to consolidate and store memories, process emotional experiences, **replenish** glucose (the molecule that fuels the brain), and clear out beta-amyloid (the waste product that builds up in Alzheimer's patients and disrupts cognitive activity).

The most common sign and symptom of the fact that one is sleep deprived is fatigue, lethargy and feeling sleepy throughout the day. Other symptoms include mood disorders; sleep deprivation may lead to increasing irritability, desire to stay alone, rapid mood swings and more. Lack of sleep will also cause psychomotor instability meaning the person will find it difficult to focus and stand still at a place. Sleep deprivation will also cause issues with sight and hearing. An affected person may experience burning sensation in eyes, tingling and redness of eyes, light flashes and even hallucinations. He or she may also find it difficult to gauge distance at which a sound is originating. Other signs and symptoms of sleep deprivation include tingling sensations on the body, disorganization of thought and much more.

Negative effects of sleep deprivation are many. It affects both physical and mental health of a person negatively. The most common effect of sleep deprivation is drowsiness, tiredness, mood swings, irritability and reduced alertness. Although scientific knowledge of the physiological effects of sleep deprivation is relatively recent but researchers now believe that sleep deprivation can lead to disorders such as depression. Both short term sleep deprivation and chronic long term sleep deprivation can be very dangerous for the health as it has a direct impact on functioning of both heart and brain of an individual. Sleep loss also blunted activity in brain regions that normally **induce** social engagement. During sleep, regeneration of neurons happens in the cerebral cortex. Thus in a sleep deprived individual the brain fails to function optimally.

The simplest and easiest way to treat sleep deprivation is sleep more. Be it acute or chronic condition, a quality good night's sleep will help an individual _____(A)_____ effectively. Fighting stress, eating a healthy and a balanced diet, avoiding alcohol are some other dos for a good night's sleep. Certain medications can also interfere with one's sleep thus consult your medical professional about the same. Exercising or indulging in an activity such as jogging, walk or swimming can also help one sleep better. Avoid usage of electronic gadgets before bedtime as they can interfere with one' sleep. Spending time in natural sunlight, Yoga, meditation and breathing exercises can also help one sleep better at night. Treating underlying medical cause if any will also help one sleep better and avoid sleep deprivation.

1. According to the passage, which among the following statements is true?
(a) Sleep allows us to enhance our ability of acquiring knowledge and process emotional experiences.
(b) An adult can function properly only with a quality sleep of 5-6 hours a day.
(c) Sleep deprivation can be cured only with a help of a medical professional.
(d) Both (a) and (b)
(e) All are true

2. What is/are the cause(s) of incompetency in a sleep deprived individual's brain?
(i) Clearing out of beta-amyloid that disrupts cognitive activity.
(ii) Sleep deprivation leads to drowsiness, tiredness and reduced alertness.
(iii) Reduction in the regrowth or repair of nervous tissues, cells or cell products in the cerebral cortex.
(a) Only (i)
(b) Only (iii)
(c) Both (i) and (iii)
(d) Both (i) and (ii)
(e) All (i) (ii) and (iii)

3. Choose the most suitable phrasal verb to fill the given blank (A) to make the sentence grammatically and contextually correct.
(a) drop back (b) break out (c) come forward
(d) bounce back (e) fall out

4. Which among the followings is true according to the context of the passage?
(a) Fighting stress, eating a healthy and a balanced diet, avoiding alcohol cures depression
(b) Sleep deprivation means a state caused by inadequate quantity or quality of sleep.
(c) Sleep deprivation has negative effects on all the five senses of human body.
(d) Treating prolong and underlying medical cause can cause sleep deprivation.
(e) All are true

5. How can one safeguard oneself from sleep deprivation?
(i) Getting regular exercise during the day.
(ii) Refraining from using electronic devices right before bed
(iii) Limiting the consumption of alcohol
(a) Only (i)
(b) Only (iii)
(c) Both (i) and (iii)
(d) Both (i) and (ii)
(e) All (i) (ii) and (iii)

Directions (6-7): Choose the most suitable word that depicts the meaning of the highlighted word.

6. SUFFICIENT
(a) Many (b) Adequate (c) Restricted
(d) Limited (e) Wanting

7. INDUCE
(a) Hasten (b) Inspire (c) Encourage
(d) Advocate (e) Evaluate

8. Which of the following word depicts the **opposite** meaning of the given word **REPLENISH**?
(a) Restore (b) Exhaust (c) Recharge
(d) Accelerate (e) Modify

Directions (9-13): In the following questions, a sentence is divided into four parts. Choose the part of the sentence which may contain a grammatical error in it. If all the parts of the sentence are grammatically correct and contextually meaningful, choose option (e) i.e. "no error" as your answer choice.

9. Slicing a cake between pieces (A)/ is a fun tradition that many (B)/ newlyweds like to (C)/ incorporate into their ceremonies. (D)/ No Error (E)
(a) A (b) B (c) C
(d) D (e) E

10. She had stayed up (A)/ all night because (B)/ she had received (C)/ bad news. (D)/ No error. (E)
(a) A (b) B (c) C
(d) D (e) E

11. He as well as (A)/ his friends (B)/ were going (C)/ for picking.(D)/ No Error (E)
(a) A (b) B (c) C
(d) D (e) E

12. The coaching industry in India (A)/ plays a pivotal role, (B)/ as it contributes significant (C)/ revenue to the education sector. (D)/ No Error (E)
(a) A (b) B (c) C
(d) D (e) E

13. If I don't (A)/ turn on my (B)/ air conditioner, my (C)/ house was hot. (D)/ No error (E)
(a) A (b) B (c) C
(d) D (e) E

Directions (14-17): In the following question, sentences are given with a part in bold. The given phrase in the bold may or may not contain an error. The options following can replace the incorrect phrase. The correct phrase that is to be replaced will be your answer. If the sentences are correct then select 'No improvement required' as your answer.

14. Everything is funny, as long as it **is happening too** somebody else.
(a) has been happening for
(b) is happening to
(c) was happening too
(d) could have happened to
(e) No improvement required

15. They recommend this book even though **they himself had** never read it.
(a) they themselves had
(b) they themself has
(c) it itself had
(d) one oneself has
(e) No improvement required

16. This is the house **that Jack built it.**
(a) that Jack is building it
(b) Which Jack built it
(c) whom Jack built
(d) that Jack built
(e) No improvement required

17. In no way do I agree with what you're saying.
(a) In no way I do
(b) In no way I don't
(c) No way I don't
(d) Do I in no way
(e) No improvement required

Directions (18-22): In the following passage some words have been deleted. Fill in the blanks with the help of the alternatives given. Select the most appropriate option for each blank.

According to some researchers, musical instruments came about **___(18)___**, depending on the available materials, and, in some cases, by the stimulus of the clamor of battle. The definition of a musical instrument is quite simple: it is an instrument that was created or **___(19)___** to make musical sounds. It is important to remember that the history of musical instruments dates back to the beginning of human culture. This tells us that man has always been drawn to music. The earliest musical instruments were used for rituals. For example, the trumpet-like ones were used to signal success in a hunt, or drum-like instruments were used in religious ceremonies.

Over time, cultures have developed the composition and performance of musical pieces for entertainment. Musical instruments have also **__(20)__** with the ever-changing applications. It appears that no one knows exactly where music came from. We are not talking here about who Elvis' singing predecessors were, not even about when the first musical instrument was invented. Researchers who have been interested in the physics of instruments believe that musical devices have always **___(21)___** pretty much on the materials that were available to each civilization. In other words, people worked with what they had. In time, traditional poetry was **__(22)__** alongside human noise-makers and got rhythms to them. Again, there is no exact data to back this up, so no one knows exactly when the first song was born. However, adding stories to melodies became a tradition that was carried on to our days and it does not seem like it will ever go out of fashion.

18. (a) deliberate (b) systematic (c) cautiously
(d) randomly (e) anxiously

19. (a) concise (b) adapted (c) prohibited
(d) distributed (e) immense

20. (a) subdued (b) evolved (c) Refine
(d) Surge (e) diminished

21. (a) relatively (b) suspected (c) depended
(d) aligned (e) sustained

22. (a) displayed (b) recited (c) elaborate
(d) arranged (e) Remembered

Directions (23-26): In each of the questions given below a sentence is given with three words in bold. Choose the option which gives the correct sequence of these words to make the sentence grammatically and contextually correct.

23. The U.P. ordinance not only **conflict(A)** guaranteed fundamental rights but is also in **violates(B)** with **existing(C)** personal laws
(a) ABC (b) BAC (c) CAB
(d) ACB (e) None of these

24. The **deficit (A)** changes in the sector brought in through the three laws have **aggravated (B)** the trust **abrupt (C)** of the government.
(a) ABC (b) CAB (c) BAC
(d) CBA (e) None of these

25. The Chinese Communist Party initially **aftermath (A)** nationalism as a co-option **embraced (B)** in the **strategy (C)** of the Tiananmen Square massacre
(a) None of these (b) CAB (c) ABC
(d) BCA (e) CBA

26. The Supreme Court has been asking States to **reservation (A)**quantifiable data to **justify (B)** their levels of **produce (C).**
(a) None of these (b) CAB (c) ACB
(d) BCA (e) CBA

Directions (27-30): In the question given below, some sentences/phrases are given which have to be arranged in a proper sequence. Select the option which best defines the proper sequence and arranges the sentence in an appropriate way.

27. (A) Sidestepping debate
(B) And discussion in Parliament
(C) Discontent over the
(D) Is a result of
(E) New farm laws
(a) DEABC
(b) EDABC
(c) No rearrangement possible
(d) AEBDC
(e) CEDAB

28. (A) Population-level vaccination plans
(B) For COVID-19
(C) Expecting from
(D) The outcomes we are
(E) It is crucial to define

(a) BCAED
(b) CABED
(c) EDCAB
(d) DCABE
(e) No rearrangement possible

29. (A) WHO must
(B) Work alongside
(C) China in quickly
(D) Origins of the virus
(E) Uncovering the
(a) EBCDA (b) CAEBD (c) EBACD
(d) ACDBE (e) ABCED

30. (A) Public activity should
(B) Be available
(C) To the public
(D) Only information
(E) Bearing a nexus to
(a) DEABC
(b) EDABC
(c) No rearrangement possible
(d) AEBDC
(e) CEDAB

QUANTITATIVE APTITUDE

31. Train A running at a speed of 36 km/hr crosses train B in 20 seconds. Find the speed of train B (in km/hr), if the sum of the length of train A & B is 600 meters and both trains running in the opposite direction.
(a) 72 km/hr (b) 54 km/hr (c) 48 km/hr
(d) 108 km/hr (e) 81 km/hr

32. A invests Rs. X in a business. After four months B joined him with Rs. 2X and A double his investment. If at the end of the years total profit is Rs. 13950, then find the profit share of A?
(a) 7250 Rs. (b) 7750 Rs. (c) 8750 Rs.
(d) 6750 Rs. (e) 7050 Rs.

33. A man invested an amount in two schemes in the ratio of 2 : 3 at the rate of 20% p.a. and 10% p.a. on compound interest respectively. If the man gets a total interest of Rs. 1208 after two years from both the schemes, the find amount invested by man?
(a) 6000 Rs. (b) 4800 Rs. (c) 5000 Rs.
(d) 4500 Rs. (e) 4000 Rs.

34. The sum of the length of a rectangle and the side of a square is 72 meters. If the perimeter of the rectangle is 84 meters and the breadth of the rectangle is 18 meters, then find the measurement of the side of the square (in meters).
(a) 48 (b) 36 (c) 54
(d) 60 (e) 30

35. The ratio of time taken by A, B & C to complete work alone is 4: 6 : 3 respectively. If all three together complete the work in 8 days, then find in how many days A alone complete three – fourth of the same work?
(a) 12 (b) 30 (c) 15
(d) 24 (e) 18

Directions (36–40): In the following questions, there are two equations in x and y. You have to solve both the equations and give answer
(a) if x > y
(b) if x < y
(c) if x ≥ y
(d) if x ≤ y
(e) if x = y or there is no relation between x and y

36. I. $2x^2 - 3x + 1 = 0$ **II.** $2y^2 - 5y + 3 = 0$

37. I. $x^2 + 21x + 110 = 0$ **II.** $y^2 + 17y + 72 = 0$

38. I. $x^2 = 4$ **II.** $y^2 - 6y + 8 = 0$

39. I. $x^2 + 9x - 22 = 0$ **II.** $2y^2 - 7y + 6 = 0$

40. I. $6x^2 + 5x + 1 = 0$ **II.** $15y^2 + 11y + 2 = 0$

41. The population of a village is decreased by 10% in the first year and then increased by 20% in the second year. Find the population of the village at the end of the second year if two years ago it was 15,000?
(a) 16180 (b) 16200 (c) 16320
(d) 16360 (e) 16480

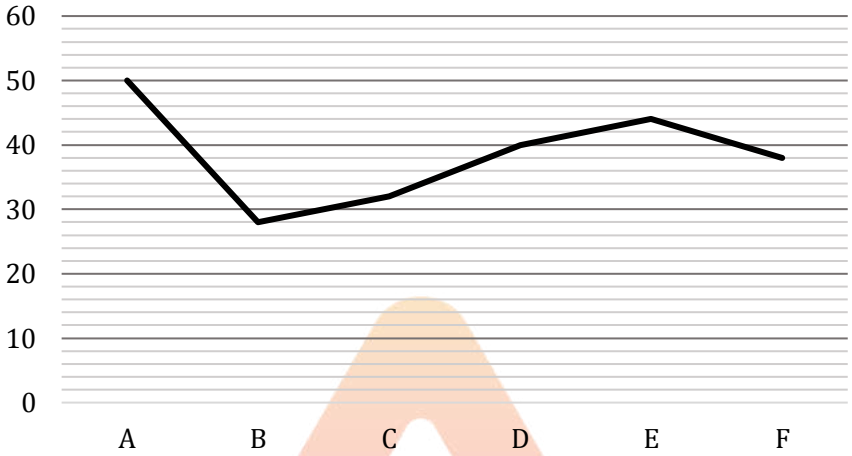
42. A shopkeeper marked up a shirt 50% above the cost price and allows successive discounts of 111/9% and 10% on it. If the difference between profit earned and discount given is Rs. 200 then find the marked price of the shirt?
(a) Rs. 2100 (b) Rs. 3000 (c) Rs. 2400
(d) Rs. 3600 (e) Rs. 3300

43. The downstream speed of a boat is 5 km/hr more than its upstream speed and the ratio of the speed of the boat in still water to the speed of the stream is 19: 5. Find the total time taken by boat to travel 42 km downstream and 31.5 km upstream?
(a) 7 ½ hr (b) 8 hr (c) 9 hr
(d) 9 ½ hr (e) 10 hr

44. A container contains a mixture of two liquids P and Q in the ratio 5 : 3. If 16 liter of the mixture is taken out and replaced with liquid Q, then the new ratio of liquid P to liquid Q becomes 1: 1. Find the initial quantity of mixture in the container.
(a) 80 L (b) 60 L (c) 70 L
(d) 48 L (e) 96 L

45. The ratio of the present age of A to B is 8: 5 and the average of the present age of B and C is 35 years. If five years ago, the sum of ages of A and B is 55 years, then find the difference between the present age of A and C.
(a) 12 years (b) 5 years (c) 9 years
(d) 8 years (e) 4 years

Direction (46 – 50): The line graph given below shows the total number of posts (Photos + Videos) shared by six (A, B, C, D, E & F) people in December 2019. Read the data carefully and answer the questions.



46. The total post shared by C is what percent less than the total post shared by D?
(a) 20% (b) 25% (c) 15%
(d) 10% (e) 30%

47. In January 2020 total posts shared by B & F is 12 and 15 more than previous month respectively, then find the total number of the post shared by B & F in January 2020?
(a) 95 (b) 91 (c) 93
(d) 97 (e) 99

48. Find the average number of posts shared by A, C & F?
(a) 42 (b) 48 (c) 40
(d) 36 (e) 44

49. Total photos shared by E is four more than total videos shared by him, then find total videos shared by E?
(a) 24 (b) 20 (c) 28
(d) 22 (e) 30

50. If the ratio of total photos to total videos shared by B is 5: 9, then find total photos shared by B?
(a) 10 (b) 18 (c) 12
(d) 14 (e) 16

Direction (51 – 65): What will come in the place of question mark in following questions.

51. $(? \div 5 \div 7) \times 14 + 112 = 420$
(a) 710 (b) 720 (c) 660
(d) 770 (e) 750

52. $(?)^{(4\times16\div32+1)} + 12^2 = 360$
(a) 4 (b) 6 (c) 8
(d) 2 (e) 3

53. $50\%\text{ of }128 + \frac{\sqrt{16}}{2} \times 4 = ? + 10$
(a) 64 (b) 62 (c) 60
(d) 56 (e) 82

54. $\frac{\sqrt[3]{1331}}{11} + \sqrt{81} + ? = 27$
(a) 19 (b) 18 (c) 17
(d) 16 (e) 15

55. $(14)^2 + 179 + (5)^2 = (?)^2$
(a) 10 (b) 20 (c) 30
(d) 40 (e) 22

56. $28.5\times 34 + 2320 \div 8 = (36)^2 - ?$
(a) 51 (b) 47 (c) 43
(d) 34 (e) 37

57. $47\times 27 + 15600 \div 8 + 181 = ?$
(a) 3320 (b) 3420 (c) 3370
(d) 3400 (e) 3460

58. $112.5\times 5 + 4560 \div 6 - 175 \times 7 = ?$
(a) 103.5 (b) 91.5 (c) 97.5
(d) 110.5 (e) 115.5

59. $80\%\text{ of }? = \sqrt{250 \times 44 + 40\%\text{ of }8500}$
(a) 80 (b) 120 (c) 150
(d) 180 (e) 240

60. ? × 40 ÷ 24 × 27 = $\frac{594}{115} \times \frac{2300}{264}$
(a) 1 (b) 2 (c) 3
(d) 4 (e) 5

61. ? + 13× 50 = 420 + 45% of 800 + 220
(a) 300 (b) 350 (c) 400
(d) 450 (e) 250

62. 12 % of ? + 12.5% of 960 = 16 × 12
(a) 840 (b) 960 (c) 800
(d) 600 (e) 400

63. 15 × ? +20% of 450 = 360
(a) 12 (b) 20 (c) 24
(d) 16 (e) 18

64. 75% of $\frac{3}{4} \times \frac{8}{9} \times 1800 = ? + 600$
(a) 300 (b) 400 (c) 250
(d) 480 (e) 540

65. ? % of 900 + 500 = 4 × 197
(a) 28 (b) 25 (c) 36
(d) 40 (e) 32

REASONING ABILITY

Directions (66-70): Study the following information carefully and answer the question given below.

Eight boxes are placed one above the another. Only two boxes are placed between box U and T. Only one box is placed between box T and R. Only two boxes are placed between box R and V. Box V is placed below box R. Three boxes are placed between S and Q, both S and Q are placed above box T. Box W is placed below box V. Not more than one box is placed between box S and box P.

66. How many boxes are there between box T and box S?
(a) None (b) One (c) Two
(d) Three (e) More than three

67. Which of the following box is placed immediately above box Q?
(a) W (b) U (c) R
(d) T (e) None of these

68. Which of the following box is placed at the bottommost position?
(a) W (b) U (c) R
(d) T (e) None of these

69. Which of the following box is placed immediately below box P?
(a) W (b) U (c) R
(d) T (e) None of these

70. How many boxes are there between box W and box R?
(a) None (b) One (c) Two
(d) Three (e) More than three

71. In the word '**BACKGROUND**' all consonants are written as their preceding letter and all vowels are written as their following letters. Then, how many letters repeated in the new arrangement?
(a) One (b) Two (c) Four
(d) Three (e) More than four

Directions (72-76): Study the following information carefully and answer the question given below-

Six persons are arranged according to their weight in descending order from left to right. E is not the heaviest among all. A is heavier than F and C. F is heavier than B and D but not heavier than E. B and C are not the lightest among all. A is not just heavier than F. E is heavier than C, who is not the 3rd heaviest among all. Weight of the 2nd lightest person is 17kg. Total weight of B and C is 44kg. 2nd heaviest person is twice heavy to the one who is 2nd lightest. C is just lighter than F. Total weight of all the persons are 150kg.

72. What may be the possible weight of F?
(a) 30kg (b) 38kg (c) 24kg
(d) 25kg (e) None of these

73. The number of persons is heavier than F is same as the number of persons lighter than ___?
(a) A (b) C (c) D
(d) B (e) None of these

74. If D is 10kg lighter than B and F is 5kg heavier than C then what is the weight of A?
(a) 23kg (b) 43kg (c) 30kg
(d) 33kg (e) None of these

75. Four of the following five are alike in a certain way and so form a group. Find the one who does not belong to that group?
(a) E-C (b) F-A (c) D-C
(d) B-D (e) F-B

76. Which of the following statement is true?
(a) Only one person is lighter to C
(b) D is the lightest among all
(c) A is lighter to D
(d) Weight of A is 50 kg
(e) None is true

Directions (77-80): In these questions, relationship between different elements is shown in the statements. The statements are followed by conclusions.

Give answer

(a) If only conclusion I is true
(b) If only conclusion II is true
(c) If either conclusion I or II is true
(d) If neither conclusion I nor II is true
(e) If both conclusions I and II are true

77. Statements: F > R ≥ T = E > W ≤ Q
Conclusions: I. E < F II. Q ≥ T

78. Statements: W = G ≥ H ≥ T = C ≤ V ≤ B
Conclusions: I. T < G II. C = G

79. Statements: K > I ≥ G > F ≤ T < R
Conclusions: I. K > T II. R > F

80. Statements: K < G ≤ D < C > R ≤ Y
Conclusions: I. C > G II. K < D

81. In the Given number '**843576529**' How many such numerals will remain at the same position, when arranged in ascending order from left to right?
(a) More than Four (b) Four
(c) Two (d) Three (e) One

Directions (82-86): Study the following information carefully and answer the question given below-

Eight persons A, B, C, D, E, F, G and H were born in the month of December of 4 different years i.e. 1956, 1957, 1958 and 1959 either on 14th or 23rd but not necessarily in the same order. E was born in the even numbered year but not the eldest among all. More than two persons were born between E and D. H was born just after D. There are as many persons born before H as same as born after B. G was born before F and after A and they all were born on the same date.

82. How many persons born before C?
(a) One (b) None (c) Two
(d) More than four (e) Four

83. In which of the following year B was born?
(a) 1956 (b) 1959 (c) Either 1956 or 1959
(d) 1957 (e) 1958

84. How many persons were born between A and F?
(a) Three (b) Five (c) Two
(d) One (e) None of these

85. Four of the following five are alike in a certain way and so form a group. Find the one who does not belong to that group?
(a) D (b) B (c) E
(d) C (e) H

86. The number of persons born between G and H is same as between ___ and ___?
(a) E, F (b) B, H (c) C, B
(d) D, G (e) None of these

Directions (87-90): In each question below are given some statements followed by two conclusions numbered I and II. You have to take the given statements to be true even if they seem to be at variance with commonly known facts and then decide which of the given conclusions logically follows from the given statements, disregarding commonly known facts. Give answer:

87. Statements: Only a few Photo are Video.
Only a few Frame are Video.
All Frame are Camera.
Conclusions: I. All Photo being Frame is a possibility.
II. Some Photo are not Camera.
(a) If both conclusions I and II follow.
(b) If only conclusion II follows.
(c) If only conclusion I follows.
(d) If neither conclusion I nor II follows.
(e) If either conclusion I or II follows.

88. Statements: Only a few City are Town.
No Town is Village.
All Village are Block.
Conclusions: I. All City can be Village.
II. Some Block are not Town.
(a) If both conclusions I and II follow.
(b) If either conclusion I or II follows.
(c) If only conclusion I follows.
(d) If neither conclusion I nor II follows.
(e) If only conclusion II follows.

89. Statements: Some Bird are not Eagle.
Some Eagle are Parrot.
Conclusions: I. Some Parrot are Bird.
II. No Parrot is Bird.
(a) If only conclusion I follows.
(b) If either conclusion I or II follows.
(c) If both conclusions I and II follow.
(d) If neither conclusion I nor II follows.
(e) If only conclusion II follows.

90. Statements: Only Banana is Apple.
Some Banana are Papaya.
Conclusions: I. Some Apple being Papaya is a possibility.
II. All Banana can be Apple.
(a) If both conclusions I and II follow.
(b) If only conclusion I follows.
(c) If either conclusion I or II follows.
(d) If neither conclusion I nor II follows.
(e) If only conclusion II follows.

Direction (91-95): Study the following information carefully and answer the questions given below:

Eight persons D, E, F, G, M, O, P and S purchase some products one after another but not necessarily in the same order. At most two persons purchase before F. Only one-person purchase between D and F. P purchase just before S. One-person purchase between P and D. M purchase just before E. O purchase before G and after E.

91. How many persons purchase after D?
(a) None (b) Two (c) More than three
(d) One (e) None of these

92. Who among the following purchase just after G?
(a) E (b) F (c) O
(d) P (e) None of these

93. If all the persons are arranged in alphabetical order from top to bottom starting from D, then find how many persons remains at the same position (excluding D)?
(a) One (b) None (c) Two
(d) Four (e) More than Four

94. Who among the following purchase exactly between D and F?
(a) E (b) O (c) M
(d) S (e) None of these

95. How many persons purchase between E and P?
(a) Five (b) Four (c) Three
(d) None (e) Two

96. How many pairs of letters are there in the word "**CHRISTMAS**" which has as many letters between them as we have in the English alphabetical series (from both forward and backward direction)?
(a) Three (b) One (c) Two
(d) None (e) More than three

Direction (97-100): Study the following arrangement carefully and answer the questions given below:
3 9 1 8 1 2 5 8 6 3 6 4 2 5 2 8 5 2 6 4 5 1 4 9 4 7 3 2 7 2 5 9

97. How many 2's is there in the above arrangement, each of which is immediately preceded by a digit which has a numerical value of more than 5?
(a) None (b) One (c) Two
(d) Three (e) More than three

98. Which of the following number is seventh to the left of the twentieth from the left end of the above arrangement?
(a) 3 (b) 9 (c) 2
(d) 7 (e) 1

99. If all the even digits are removed from the above arrangements then, which of the following digit will be tenth from the right end of the arrangement?
(a) 9 (b) 5 (c) 1
(d) 3 (e) 7

100. How many such 1's is there in the above arrangement, each of which is immediately followed by a perfect square?
(a) None (b) One (c) Two
(d) Three (e) More than three

Solutions

ENGLISH LANGUAGE

1. (a): Only statement (a) is correct.
For statement (a) Refer to the 2nd paragraph, ". Sleep allows us to consolidate and store memories, process emotional experiences, replenish glucose (the molecule that fuels the brain), and clear out beta-amyloid (the waste product that builds up in Alzheimer's patients and disrupts cognitive activity)."
For statement (b) refer to the 1st paragraph, "An adult requires 7 to 8 hours of peaceful and quality sleep per day."
For statement (c) refer to the last paragraph, "The simplest and easiest way to treat sleep deprivation is sleep more."

2. (b): Refer to the last sentence of the 3rd paragraph "During sleep, regeneration of neurons happens in the cerebral cortex. Thus, in a sleep deprived individual the brain fails to function optimally." Hence, option (b) is correct.

3. (d): Bounce back means to return quickly to a normal condition after a difficult situation.
Drop back means fall back or get left behind.
Break out means escape.
Come forward means volunteer oneself for a task or post or to give evidence about a crime.
Fall out means have an argument.

4. (b): Among the given statements only statement (b) is correct.
For statement (b) refer to the 1st paragraph "Sleep deprivation can be defined as inability to complete the sufficient sleep-time required by the person."
All the other statements are factually incorrect.

5. (e): Refer to the last paragraph, "***Fighting stress, eating a healthy and a balanced diet, avoiding alcohol*** are some other dos for a good night's sleep. Certain medications can also interfere with one's sleep thus consult your medical professional about the same. ***Exercising or indulging in an activity such as jogging, walk or swimming can also help one sleep better***. ***Avoid usage of electronic gadgets before bedtime*** as they can interfere with one' sleep. Spending time in natural sunlight, Yoga, meditation and breathing exercises can also help one sleep better at night."

6. (b): Sufficient means enough; adequate.

7. (c): Induce means bring about or give rise to.
Encourage means stimulate the development of (an activity, state, or belief).

8. (b): Replenish means restore (a stock or supply) to a former level or condition.

9. (a): Replace 'between' by 'into'. "Into" is used to show when a person or thing is changing from one form or condition to another:

10. (a): The past perfect tense in a sentence or conversation describes an event that happened in the past before another event in the simple past tense was completed in the past. Thus the correct phrase should be "She stayed up".

11. (c): 'were; should be replaced by 'was'. Words joined to a singular subject by 'with', 'together with', 'in addition to', 'or', 'as well as', 'besides' etc. The verb must take place with the first subject of the sentence.

12. (e): The sentence is grammatically correct.

13. (d): 'was' should be replaced by 'is'. Zero conditional sentences refer to the general truth about a situation. These sentences state that one condition always results in the same outcome. Note that the both clauses should be in the present tense.

14. (b): Replace "too" with "to"
To is a preposition with several meanings, including "toward" and "until."
Too is an adverb that can mean "excessively" or "also."

15. (a): reflexive pronouns can also act as intensive pronouns, but the function and usage are different. An intensive pronoun emphasizes its antecedent. Hence, the correct phrase is "they themselves had". Thus, option (a) is correct.

16. (d): The relative pronoun is the subject/object of the relative clause, so we do not repeat the subject/object, Here, that is the object of built, so we don't need 'it'.

17. (e): The given sentence is grammatically correct.

18. (d): Option (d) is the correct choice.
"Randomly": in a way that happens, is done, or is chosen by chance rather than according to a plan.
All the other words are either grammatically or contextually incorrect.
Cautiously: in a careful and well-considered way that avoids risk
Anxiously: in a way that shows you are worried or nervous

19. (b): "Adapted" is the correct choice.
Adapted: to change something so that you can use it in a different situation
Concise: giving a lot of information in a few words; brief
Immense: very big or great
Prohibited: to say that something is not allowed by law; to forbid

20. (b): Option (b) is the correct choice.
Subdued: quieter and with less energy than usual
Evolved: to develop or to make something develop gradually, from a simple to a more advanced form
Refine: to improve something by changing little details
Surge: a sudden strong movement in a particular direction by a large number of people or things

21. (c): Option (c) is the correct choice.
Meaning of some other words:
Sustained: to make something continue for a long period of time without becoming less
Aligned: to arrange things in a straight line or so that they are parallel to something else

22. (b): Option (b) is the correct choice.
Recited-- to say aloud a piece of writing, especially a poem or a list, from memory
Elaborate-- very complicated; done or made very carefully

23. (b): "**BAC"** is the correct sequence.
The U.P. ordinance not only violates guaranteed fundamental rights but is also in conflict with existing personal laws

24. (d): "**CBA"** is the correct sequence.
The abrupt changes in the sector brought in through the three laws have aggravated the trust deficit of the government.

25. (d): "BCA" is the correct sequence
The Chinese Communist Party initially embraced nationalism as a co-option strategy in the aftermath of the Tiananmen Square massacre

26. (e): "CBA" is the correct sequence.
The Supreme Court has been asking States to produce quantifiable data to justify their levels of reservation.

27. (e): Option (e)- CEDAB is the correct sequence for the given question.
"Discontent over the new farm laws is a result of sidestepping debate and discussion in Parliament"

28. (c): Option (c)- EDCAB is the correct sequence for the given question.
"It is crucial to define the outcomes we are expecting from population-level vaccination plans for COVID-19 "

29. (e): Option (e)- ABCED is the correct sequence for the given question.
WHO must work alongside China in quickly uncovering the origins of the virus.

30. (a): DEABC is the correct sequence for the given question.
Only information bearing a nexus to public activity should be available to the public

QUANTITATIVE APTITUDE

31. (a): Let speed of train B be s km/hr
ATQ –
$20(36 + s) \times \frac{5}{18} = 600$
$3600 + 100s = 10800$
$100s = 7200$
$S = 72$ km/hr

32. (b): Profit ratio of A to B = $(X \times 4 + 2X \times 8) : (2X \times 8) = 20X: 16x = 5: 4$
So, profit of A = $13950 \times \frac{5}{9} = 7750\ Rs.$

33. (e): Let amount invested by man = 10x Rs.
Equivalent CI for two years at the rate of 20% p.a. = $20 + 20 + \frac{20\times20}{100} = 44\%$
Equivalent CI for two years at the rate of 20% p.a. = $10 + 10 + \frac{10\times10}{100} = 21\%$
ATQ
$10x \times \frac{2}{5} \times \frac{44}{100} + 10x \times \frac{3}{5} \times \frac{21}{100} = 1208$
$\frac{176x}{100} + \frac{126x}{100} = 1208$
x = 400 Rs.
Required amount = 4000 Rs.

34. (a): ATQ –
$2(l + 18) = 84$
$2l = 48$
$l = 24$ meters
So, measurement of side of square = 72 – 24 = 48 meters

35. (e): Ratio of efficiency of A, B & C = 3 : 2 : 4
So, let total work = $(3x + 2x + 4x) \times 8 = 72x$ unit
Required days = $72x \times \frac{3}{4} \times \frac{1}{3x} = 18$ days

36. (d): **I.** $2x^2 - 2x - x + 1 = 0$
$2x(x - 1) - 1(x - 1)$
$x = \frac{1}{2}, 1$
II. $2y^2 - 2y - 3y + 3 = 0$
$2y(y - 1) - 3(y - 1) = 0$
$y = \frac{3}{2}, 1$
$x \le y$

37. (b): **I.** $x^2 + 10x + 11x + 110 = 0$
$x(x + 10) + 11(x + 10) = 0$
$x = -10, -11$
II. $y^2 + 9y + 8y + 72 = 0$
$y(y + 9) + 8(y + 9)$
$y = -9, -8$
$x < y$

38. (d): **I.** $x = \pm 2$
II. $y^2 - 2y - 4y + 8 = 0$
$y(y - 2) - 4(y - 2) = 0$
$y = 2, 4$
$x \le y$

39. (e): **I.** $x^2 + 9x - 22 = 0$
$\Rightarrow x^2 + 11x - 2x - 22 = 0$
$\Rightarrow (x + 11)(x - 2) = 0$
$\Rightarrow x = -11, 2$
II. $2y^2 - 7y + 6 = 0$
$\Rightarrow 2y^2 - 4y - 3y + 6 = 0$
$\Rightarrow 2y(y-2) - 3(y-2) = 0$
$\Rightarrow (y-2)(2y-3) = 0$
$\Rightarrow y = 2, \frac{3}{2}$
No relation

40. (e): **I.** $6x^2 + 5x + 1 = 0$
$6x^2 + 3x + 2x + 1 = 0$
$3x(2x + 1) + 1(2x + 1) = 0$
$x = -\frac{1}{2}$ or $-\frac{1}{3}$
II. $15y^2 + 11y + 2 = 0$
$15y^2 + 6y + 5y + 2 = 0$
$3y(5y + 2) + 1(5y + 2) = 0$
$\therefore y = -\frac{2}{5} or -\frac{1}{3}$
$\therefore$ no relation can be established

41. (b): required population = 15000 × 0.9 × 1.2
= 16200

42. (b): Let the CP of shirt be Rs. 100x
Then MP = Rs. 150x
SP = $150x \times \frac{8}{9} \times \frac{9}{10}$ = Rs. 120x
Profit = Rs. 20x
Discount given =Rs. 30x
ATQ,
10x = 200
$\Rightarrow$ x = 20
MP = Rs 3000

43. (b): Let the speed of boat in still water be x km/hr and that of stream be y km/hr.
ATQ
(x + y) – (x – y) =5
$\Rightarrow$ y=2.5 km/hr
$x=2.5 \times \frac{19}{5} = 9.5\ km/hr$
Required time= $\frac{42}{(9.5+2.5)} + \frac{31.5}{(9.5-2.5)} = 8$ hr

44. (a): Let initial quantity of liquid P and Q in container be 5x & 3x respectively
So,
$\frac{5x-\frac{5}{8}\times 16}{8x} = \frac{1}{2}$
5x – 10 = 4x
x = 10
Initial quantity of mixture = (5 + 3) × 10 = 80 liter

45. Ans. (b): Let present age of B be 5x years.
So, present age of A = $5x \times \frac{8}{5}$ = 8x years
Now, present age of C = $35 \times 2 - 5x = (70 - 5x)$ years
ATQ,
$(8x - 5) + (5x - 5) = 55$
$x = 5$
Required difference = $(70 - 5x) - 8x$ = 5 years

46. (a): Required percentage = $\frac{40-32}{40} \times 100 = 20\%$

47. (c): Required sum = (28 + 12) + (38 + 15) = 93

48. (a): Required average = $\frac{50+32+38}{3}$ = 40

49. (b): Let total videos shared by E = x
So, total photos shared by E = (x + 4)
ATQ –
x + x + 4 = 44
2x = 40
X = 20

50. (a): Total photos shared by B = $28 \times \frac{5}{14} = 10$

51. (d): $(? \div 5 \div 7) \times 14 = 308$
$? = 22 \times 35$
? = 770

52. (b): $?^3 + 144 = 360$
$?^3 = 216$
? = 6

53. (b): $\frac{128}{2} + \frac{4}{2} \times 4 = ? + 10$
64 + 8 = ? + 10
? = 62

54. (c): $\frac{11}{11} + 9 + ? = 27$
1 + 9 + ? = 27
? = 17

55. (b): $196 + 179 + 25 = (?)^2$
$(?)^2 = 400$
? = 20

56. (e): $28.5 \times 34 + 2320 \div 8 = (36)^2 - ?$
969 + 290 =1296 - ?
1259 =1296 - ?
?=1296 -1259 =37

57. (d): ?= 47× 27 + 15600 ÷ 8 + 181
= 1269 + 1950 +181
=3400

58. (c): ? = 112.5× 5 + 4560 ÷ 6 − 175 × 7
=562.5 + 760 – 1225
=1322.5 – 1225
= 97.5

59. (c): $80\%\ of\ ? = \sqrt{250 \times 44 + \frac{40 \times 8500}{100}}$
$\Rightarrow \frac{80}{100} \times ? = \sqrt{11000 + 3400}$
$\Rightarrow ? = \sqrt{14400} \times \frac{10}{8}$
$\Rightarrow ? = 120 \times \frac{10}{8} = 150$

60. (a): $?\times\frac{40}{24}\times 27=\frac{594}{115}\times\frac{2300}{264}$
$\Rightarrow ?\times 45=45$
$\Rightarrow ?=1$

61. (b): $?+13\times 50=420+\frac{45}{100}\times 800+220$
$\Rightarrow ?+650=420+360+220$
$\Rightarrow ?=1000-650=350$

62. (d): $\frac{12}{100}\times ?+\frac{1}{8}\times 960=192$
$\frac{12}{100}\times ?=192-120$
$\frac{12}{100}\times ?=72$
$?=600$

63. (e): $15\times ?+\frac{20}{100}\times 450=360$
$15\times ?=360-90$
$15\times ?=270$
$?=18$

64. (a): $\frac{3}{4}\times\frac{3}{4}\times\frac{8}{9}\times 1800=?+600$
$?=900-600$
$?=300$

65. (e): $\frac{?}{100}\times 900+500=788$
$?=\frac{288\times 100}{900}$
$?=32$

REASONING ABILITY

Directions (66-70):

Boxes
S
P
U
R
Q
T
V
W

66. (e): **67. (c):** **68. (a):**

69. (b): **70. (d):**

71. (a):

B A C K G R O U N D
A B B J F Q P V M C

Directions (72-76):

A > E > F > C > B > D
34 27 17

72. (a): **73. (b):** **74. (d):**

75. (d): **76. (b):**

Direction (77-80):

77. (a): **I.** E < F (True) **II.** Q ≥ T (False)

78. (c): **I.** T < G (False) **II.** C = G (False)

79. (b): **I.** K > T (False) **II.** R > F (True)

80. (e): **I.** C > G (True) **II.** K < D (True)

81. (d):

8 4 3 5 7 6 5 2 9
2 3 4 5 5 6 7 8 9

Directions (82-86):

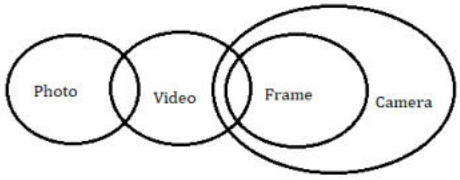
Years	Month	Date	Persons
1956	December	14	D
		23	H
1957		14	C
		23	A
1958		14	E
		23	G
1959		14	B
		23	F

82. (c): **83. (b):** **84. (a):**

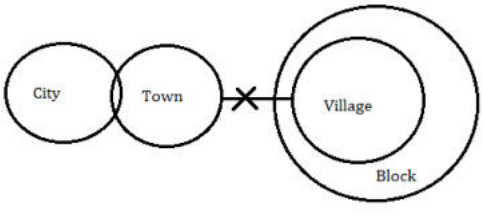
85. (e): **86. (c):**

Directions (87-90):

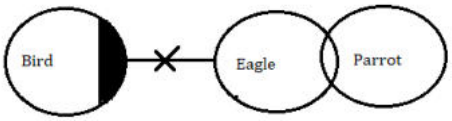
87. (c):



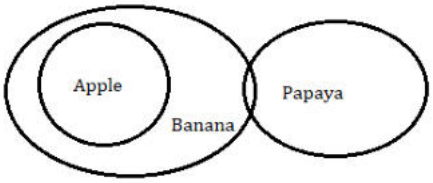
88. (e):



89. (b):



90. (d):



Direction (91-95):

Persons
M
E
F
O
D
G
P
S

91. (e): **92. (d):** **93. (d):**
94. (b): **95. (b):**

96. (c):

Direction (97-100):

97. (b): "7 2"

98. (c): "2"

99. (b): "5"

100. (b): "1 4"

REASONING ABILITY

1. If 2 is subtracted from each even digit and 1 is added to each odd digit in the given number '2145673', then how many digits will appear more than one in the new number thus formed?
(a) None (b) One (c) Two
(d) Three (e) None of these

Directions (2-6): Study the following information carefully and answer the question given below-
Eight persons live in a building of four floors such that ground floor is numbered 1 and floor above it is 2 and so on up to 4th floor. Each of the floor consist of 2 flats as flat-P, which is in west of flat Q. Flat-P of floor-2 is immediately above flat-P of floor-1 and immediately below flat-P of floor-3 and in the same way flat-Q of each floor follow same pattern.
A lives on an even numbered floor. A lives just above the flat of E. B lives to the west of E. One floor gap between D and C. H lives in the east of D. G lives on the 3rd floor. Both F and C live in the different flats.

2. Who among the following lives just below the flat in which G lives?
(a) B (b) C (c) A
(d) Both (b) and (c) (e) None of these

3. How many floors gap between B and H?
(a) None (b) Two (c) One
(d) Either (a) or (c) (e) Either (b) or (c)

4. What is the direction of G with respect to E?
(a) South (b) North-east (c) North
(d) East (e) North-west

5. Which of the following floor does C lives?
(a) Floor-1 (b) Floor-4 (c) Floor-3
(d) Floor-2 (e) None of these

6. Which of the following is true regarding H?
(a) Floor 4 – Flat P
(b) Floor3- Flat Q
(c) Floor 2- Flat P
(d) Floor4- Flat Q
(e) Floor1- Flat Q

Direction (7-11): Study the following information carefully and answer the questions given below:
In a certain code language
'plan to go exam' is coded as 'oj kr mn pc'
'exam today easy' is coded as 'si oj ly'
'plan your exam today' is coded as 'zm oj si mn '
'make your plan today' is coded as 'zm si mn rk'

7. What is the code of 'make' as per the given code language?
(a) zm (b) mn (c) rk
(d) pc (e) None of these

8. What is the code of 'exam' as per the given code language?
(a) rk (b) pc (c) kr
(d) oj (e) None of these

9. What is the code of 'go' as per the given code language?
(a) pc (b) si (c) kr
(d) either 'pc' or 'kr' (e) None of these

10. What is the code of 'exam today' as per the given code language?
(a) si oj (b) mn kr (c) lv si
(d) zm oj (e) None of these

11. If 'easy to plan' is coded as 'mn ly pc' then what is the code of 'go' as per the given code language?
(a) pc (b) zm (c) kr
(d) mn (e) None of these

12. How many pairs of letters are there in the word "GRANDUAL" each of which have as many letters between them in the word as they have between them in the English alphabetical series??
(a) Three (b) Four (c) Two
(d) One (e) Five

Directions (13-15): Study the information carefully and answer the questions given below.
Point P is 26m west of point S. Point G is 52m north of point P. Point M is 39m east of point G and point K is 13m south of point G. Point H is 39m north of point S.

13. In which direction point P with respect to point M?
(a) South (b) South-east (c) North-east
(d) East (e) None of these

14. What is the shortest distance between point K and point H?
(a) 13m (b) 26m (c) 39m
(d) 25m (e) None of these

15. If Point Z is 13m north of point H, then what is the distance between point M and point Z?
(a) 13m (b) 26m (c) 39m
(d) 25m (e) None of these

Directions (16-20): Study the following information carefully and answer the question given below-

Seven persons D, G, P, L, J, U and Q are sitting in a row facing to the north. They all have of different ages. D sits 3rd from one of the extreme ends of the row. Q sits 2nd to the right of D. The number of persons sit to the left of Q is same as the number of persons sit to the right of G, who is 20 years old. P sits 4th to the left of the one who is 35 years old. Q is not 35 years old. Total age of immediate neighbours of D is 75 years. J is 30 years old. P is 20 year older than one of his immediate neighbours. U sits to the right of L, who sits immediate to the left of the one who is 25 years old. Q is 5 year younger than P.

16. The number of persons sit between L and Q is same as the number of persons sit between P and ___?
(a) D (b) G (c) U
(d) Q (e) None of these

17. What is the position of J with respect to Q?
(a) 2nd to the left
(b) Immediate left
(c) Immediate right
(d) 4th to the left
(e) 3rd to the right

18. Four of the following five are alike in a certain way and so form a group. Find the one who does not belong to that group?
(a) P (b) G (c) J
(d) L (e) U

19. Who among the following is 40 years old?
(a) L (b) P (c) D
(d) U (e) None of these

20. Which of the following statement is true?
(a) J sits to the right of L
(b) D sits 3rd to the right of G
(c) P sits at one of the extreme ends
(d) None is true
(e) Q sits immediate right of the one who is 35 years old

21. Study the following information carefully and answer the given questions.

Six persons i.e. P, Q, R, S, T and U was born on different days of the same week starting from Monday to Saturday, but not necessarily in the same order. P was born on Friday. Two persons were born between U and P. One person was born between R and S. If T was born immediate before S, then who among the following person was born on Wednesday?
(a) U (b) R (c) S
(d) T (e) None of these

Directions (22-26): Study the following information carefully and answer the question given below-

Ten boxes are placed one above the other. Four boxes are placed between J and M. Two boxes are placed between J and k, which placed above of the J. L is placed just below K. The number of boxes between L and M is same the number of boxes between M and Q. T is placed just above Q. Y is placed just above O. X is adjacent to M. P is placed below X.

22. How many boxes are placed between O and L?
(a) One (b) More than Five (c) Four
(d) Three (e) Two

23. Four of the following five are alike in a certain way and so form a group. Find the one who does not belong to that group?
(a) T-Y (b) X-L (c) K-P
(d) Q-O (e) M-Q

24. Which of the following statement is true?
(a) L is 3rd from the topmost position
(b) Two boxes placed between K and M
(c) Q is above P
(d) T is placed at bottommost position
(e) Three boxes placed between Y and M

25. What is the position of Y from the bottommost?
(a) Seven (b) Eight (c) Six
(d) Five (e) Three

26. If T and O interchange their positions then which among the following box is placed just below O?
(a) Y (b) X (c) K
(d) Q (e) None of these

Directions (27-31): Study the following information carefully and answer the question given below-

A certain number of persons sit in a row facing to the north direction. L sits 3rd to the left of M. Five persons sit between M and N. J sits immediate to the right of M. Three persons sit between Q and J. Q does not sit next to N. N is 7th from one of the ends. The number of persons sit to the right of Q is four more than the persons who sit to the left of N. K sits 2nd from one of the ends and sit to the right of M.

27. How many persons sit in the above arrangement?
(a) 25 (b) 26 (c) 28
(d) 24 (e) None of these

28. If two persons sit between X and N, then what is the position of X with respect to L?
(a) 4th to the left
(b) 6th to the left
(c) 5th to the right
(d) 3rd to the left
(e) 7th to the left

29. How many persons sit between L and J?
(a) Five (b) None of these (c) Seven
(d) Four (e) Three

30. What is the position of L with respect to Q?
(a) 8th to the right
(b) 8th to the left
(c) 6th to the right
(d) 5th to the left
(e) None of these

31. How many persons sit to the right of the one, who sits immediate left of J?
(a) Ten (b) Seven (c) None of these
(d) Eight (e) Eleven

Directions (32-35): In these questions, relationships between different elements are shown in the statements. These statements are followed by two conclusions. Give answer
(a) If only conclusion I follows.
(b) If only conclusion II follows.
(c) If either conclusion I or II follows
(d) If neither conclusion I nor II follows.
(e) If both conclusions I and II follow.

32. Statements: Z > O = G < I ≤ S > P
Conclusions: I. S > O **II.** P > G

33. Statements: K ≥ M > W ≥ T ≤ Y< Q
Conclusions: I. T < Q **II.** T < K

34. Statement: J ≤ V < R > M, L> M = I ≥ H
Conclusions: I. V ≥ H **II.** H ≤ M

35. Statement: I = H ≥ B ≥ N < D > L
Conclusions: I. B < N **II.** L > H

Directions (36-40): Study the following information carefully and answer the question given below-

Nine persons sit around a circular table. Some of them are facing to the centre while some are facing outside the centre. C sits 2nd to the right of A, who faces inside. Two persons sit between C and G. J sits 3rd to the left of G. L sits 2nd to the left of J, who does not sit next to C. B sits 3rd to the right of L and is an immediate neighbour of P. K sits 4th to the right of H, who does not sit near J. Both B and P face same direction as A. C and G face opposite direction to each other. K does not face outside.

36. What is the position of P with respect to K?
(a) 3rd to the right
(b) 2nd to the left
(c) Immediate left
(d) 3rd to the left
(e) 5th to the right

37. How many persons sit between J and H, when counted from the left of H?
(a) Five (b) Six (c) Four
(d) One (e) Three

38. Four of the following five are alike in a certain way and so form a group. Find the one who does not belong to that group?
(a) C-H (b) L-K (c) B-J
(d) H-L (e) B-P

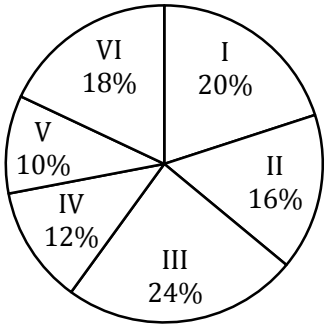
39. How many persons sit between G and H, when counted from the left of G?
(a) Three (b) Five (c) Two
(d) Four (e) None of these

40. How many persons face outside from the centre?
(a) Three (b) Four (c) None of these
(d) Six (e) Five

Quantitative Aptitude

Directions (41-46): Pie chart shows the percentage distribution of total students appeared in six different shifts of an exam. Study the pie chart given below and answer the following questions.

Total students appeared in exam - 5500



41. Find average number of students appeared in shift I, II & IV of the exam.
(a) 1040 (b) 900 (c) 720
(d) 1140 (e) 880

42. Find the central angle for students appeared in shift II of the examination.
(a) 64.2° (b) 48° (c) 57.6°
(d) 43.6° (e) 52.8°

43. Find total number of students appeared in shift V & VI together of the examination.
(a) 1740 (b) 1600 (c) 1820
(d) 1960 (e) 1540

44. Students appeared in shift III & IV together of the examination are what percent more or less than students appeared in shift I of the examination?
(a) 90% (b) 80% (c) 70%
(d) 50% (e) 60%

45. Find ratio of students appeared in shift IV & VI together of the examination to students appeared in shift II & III together of the examination.
(a) 3:4 (b) 5:7 (c) 4:3
(d) 7:5 (e) None of the above.

46. Students appeared in shift I & VI together of the examination are how much more or less than students appeared in shift III & V together of the examination?
(a) 330 (b) 150 (c) 360
(d) 280 (e) 220

47. A vessel contains mixture of milk and water in the ratio of 7:1 respectively. 24 liters mixture is removed from the vessel and if the quantity of remaining milk in the vessel is 56 liters, then find quantity of water in the vessel initially.
(a) 11 liters (b) 15 liters (c) 12 liters
(d) 9 liters (e) 8 liters

48. A & B together can complete a piece of work in 9 days. Time taken by A alone to complete the same work is 7.5 days less than time taken by B alone to complete the same work. In how many days B alone will complete $\frac{2}{9}$ of the work?
(a) 8 days (b) 6 days (c) 7 days
(d) 5 days (e) 4 days

49. Ratio of ages of A and B, 4 years later is 8:9 respectively. If average of present ages of A & B is 47 years, then find difference in present ages of A & B.
(a) 5 years (b) 6 years (c) 3 years
(d) 2 years (e) 4 years

50. There are 75% boys out of total students (boys + girls) in a school and 39% of the total students of the school went on a picnic. If 32% of the total boys went on a picnic, then find what percent of total girls went on a picnic?
(a) 60% (b) 90% (c) 75%
(d) 80% (e) 50%

51. Number of passed students in an exam in section A & B are 240 & 210 respectively. If in section A 40% of the total students got failed and in section B 30% of the total students got failed, then find difference between total number of students in section A & B.
(a) 40 (b) 80 (c) 150
(d) 120 (e) 100

Directions (52-56): In the given questions, two equations (I) & (II) are given. You have to solve both the equations and mark the answer accordingly.

52. I. $x^2 + 9x + 20 = 0$
II. $8y^2 - 15y + 7 = 0$
(a) $x < y$ (b) $x > y$ (c) $x \leq y$
(d) $x \geq y$ (e) $x = y$ or no relation.

53. I. $x^2 - 11x + 30 = 0$
II. $y^2 + 12y + 36 = 0$
(a) $x < y$ (b) $x > y$ (c) $x \leq y$
(d) $x \geq y$ (e) $x = y$ or no relation.

54. I. $x^2 + 13x + 40 = 0$
II. $y^2 + 7y + 10 = 0$
(a) $x < y$ (b) $x > y$ (c) $x \leq y$
(d) $x \geq y$ (e) $x = y$ or no relation.

55. I. $x^2 - 20x + 91 = 0$
II. $y^2 + 16y + 63 = 0$
(a) $x < y$ (b) $x > y$ (c) $x \leq y$
(d) $x \geq y$ (e) $x = y$ or no relation.

56. I. $x^2 - x - 12 = 0$
II. $y^2 + 5y + 6 = 0$
(a) $x < y$ (b) $x > y$ (c) $x \leq y$
(d) $x \geq y$ (e) $x = y$ or no relation.

Directions (57-62): Study the table given below and answer the following questions.

Table gives information about total number of students in 3 different schools in 1999 & 2000 and also gives information about total number of girls in these 3 schools in 1999 & 2000.

School	Year			
	1999		2000	
	Total students	Total Girls	Total students	Total girls
A	720	360	900	450
B	360	180	600	180
C	450	270	400	120

Note: Total students in any school in any year = Total (Boys + Girls) in that school in that year.

57. If average number of students in school A in 1999, 2000 & 2001 are 700, then find total number of students in school A in 2001.
(a) 540 (b) 480 (c) 420
(d) 600 (e) 360

58. Number of girls in school – A & B together in 2000 are what percent more or less than total number of students in school – B & C together in 2000?
(a) 27% (b) 42% (c) 37%
(d) 30% (e) 45%

59. Find total number of boys in school – A, B & C together in 1999.
(a) 720 (b) 640 (c) 680
(d) 760 (e) 800

60. Average number of students in school – A, B & C in 1999 are what percent of total students in school – B in 2000?
(a) 95% (b) 85% (c) 75%
(d) 55% (e) 65%

61. Find ratio of number of boys in school – B in 2000 to number of boys in school – C in 2000.
(a) 5:4 (b) 4:5 (c) 2:3
(d) 3:2 (e) None of the above.

62. Total number of girls in school – A, B & C together in 1999 are how much more or less than total number of girls in school – A, B & C together in 2000?
(a) 140 (b) 60 (c) 180
(d) 90 (e) 100

Directions (63-67): In the following questions, calculate quantity I and quantity II, compare them and answer according to the following options.
(a) If Quantity I > Quantity II
(b) If Quantity I < Quantity II
(c) If Quantity I ≥ Quantity II
(d) if Quantity I ≤ Quantity II
(e) if Quantity I = Quantity II or no relation can be established

63. Quantity I. Profit earned on selling an article at Rs. 450 at 20% profit
Quantity II. Cost price of the article which is sold at Rs.84 on 20% profit

64. In a village there are 60% males and rest are females. 30% of total male are illiterate and 25% of total female are illiterate. Number of illiterate males is 1152.
Quantity I. Literate females in the village.
Quantity II. 1940

65. A man invested Rs. P at 12% p.a. on simple interest for two years.
Quantity I. If at the end of second year he gets Rs.1200 as interest, then find Rs.P.
Quantity II. Rs.6000

66. Ploughing cost of a rectangular field is Rs.288 at the rate of Rs.3 per square meter. Length of the field is 4 meters more than the width of field.
Quantity I. Length of rectangular field.
Quantity II. 12 meters.

67. Quantity I. Sum of present ages of Shivam and Prashant is 32 years and Shivam is 8 years older than Prashant. Find present age of Prashant.
Quantity II. 15 years.

68. 'A' invested Rs.4000 and 'B' invested Rs.1000 more than A. After eight months 'C' invested Rs.3000. If at the end of the year 'C' gets profit of Rs.700, then find the total profit.
(a) Rs.7000 (b) Rs.8400 (c) Rs.5600
(d) Rs.8800 (e) Rs.6400

69. 440 meters long train passes a platform in 80 seconds. If speed of train is increased by 3 m/sec, then it crosses a pole in 22 seconds. Find the length of platform.
(a) 720m (b) 840m (c) 700m
(d) 920m (e) 900m

70. Selling price of an article becomes Rs.2160 after giving two successive discounts of x% and 25% and marked price of article is Rs.3600. Find the cost price of article if there is a profit of x% on selling the article after giving two successive discounts.
(a) Rs. 1720 (b) Rs.1500 (c) Rs.1600
(d) Rs.1800 (e) Rs.1900

71. Three are 5 green balls, 7 blue balls and 3 red balls in a bag. If 2 balls are chosen randomly from the bag, then find the probability that at least one ball is green ball.
(a) $\frac{1}{9}$ (b) $\frac{2}{7}$ (c) $\frac{3}{8}$
(d) $\frac{3}{5}$ (e) $\frac{4}{7}$

72. Speed of boat in still water is six times of speed of stream. If boat covers 210 km in upstream in 7 hours, then find the downstream speed of boat?
(a) 42 km/hr. (b) 36 km/hr. (c) 30 km/hr.
(d) 32 km/hr. (e) 24 km/hr.

73. Length of rectangle 'A' is 125% of its breadth and area of rectangle 'A' is 1280 cm^2. If width of rectangle 'A' is half of the side of a square, then find perimeter of square.
(a) 72m (b) 64m (c) 84m
(d) 96m (e) 60m

74. The average weight of a class of 45 girls is 53 kg. It was later found that weight of two girls was read as 49 kg and 57 kg instead of 45 kg and 52 kg. Find the actual average weight of the class.
(a) 54 kg (b) 53.40 kg (c) 50.6 kg
(d) 52.80 kg (e) 51.5 kg

Directions (75-80): Find the value of (?) in the following number series.

75. 1.5, 3, 12, 72, 576, ?
(a) 5480 (b) 5620 (c) 5580
(d) 5340 (e) 5760

76. 80, 66, 85, 61, 90, ?
(a) 50 (b) 56 (c) 64
(d) 60 (e) 63

77. 163, ?, 43, 23, 13, 8
(a) 92 (b) 83 (c) 78
(d) 54 (e) 69

78. 150, 152, 157, 167, 184, ?
(a) 229 (b) 245 (c) 232
(d) 210 (e) 206

79. 3.5, 2.5, 3, 6, 20, ?
(a) 95 (b) 80 (c) 65
(d) 75 (e) 90

80. 6300, ?, 525, 105, 17.5, 2.5
(a) 2400 (b) 2100 (c) 4200
(d) 5200 (e) 3600

Solutions

REASONING ABILITY

1. (c): 2 1 4 5 6 7 3
0 **2 2** 6 **4** 8 **4**

Solutions (2-6):

Floors	Flat-P	Flat-Q
4	D	H
3	G	F
2	C	A
1	B	E

2. (b): **3. (b):** **4. (e):**
5. (d): **6. (d):**

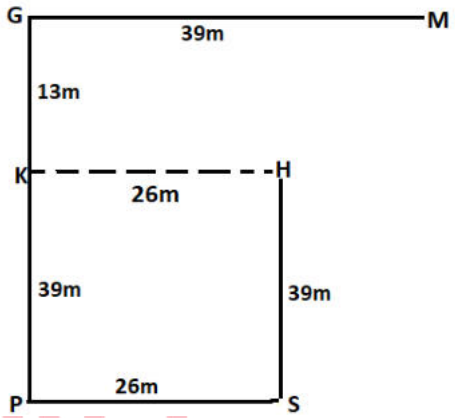
Solutions (7-11):

Words	Codes
Plan	mn
To	kr/pc
Go	pc/kr
Exam	oj
Easy	ly
Today	si
Your	zm
Make	rk

7. (c): **8. (d):** **9. (d):**
10. (a): **11. (c):**

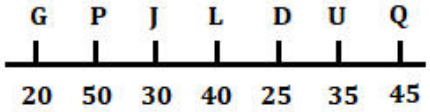
12. (c):

Solutions (13-15):



13. (e):
14. (b):
15. (a)

Solutions (16-20):



16. (a): **17. (d):** **18. (e):**
19. (a): **20. (e):**

21. (d):

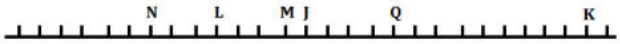
Days	Persons
Monday	Q
Tuesday	U
Wednesday	T
Thursday	S
Friday	P
Saturday	R

Solutions (22-26):

Boxes
T
Q
Y
O
M
X
K
L
P
J

22. (d): **23. (e):** **24. (c):**
25. (b): **26. (d):**

Solutions (27-31):



27. (c): **28. (b):** **29. (e):**

30. (b): **31. (c):**

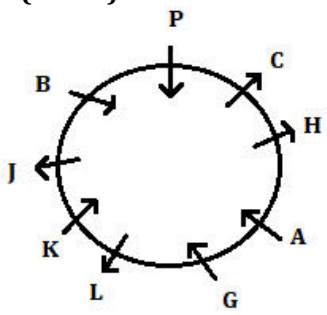
32. (a): **I.** S > O (True) **II.** P > G(False)

33. (e): **I.** T < Q (True) **II.** T < K (True)

34. (b): **I.** V ≥ H(False) **II.** H ≤ M (True)

35. (d): **I.** B < N (False) **II.** L > H (False)

Solutions (36-40):



36. (d): **37. (e):** **38. (d):**
39. (e): **40. (b):**

Quantitative Aptitude

41. (e): Required average = $\frac{1}{3} \times \left(5{,}500 \times \frac{20+16+12}{100}\right) = 880$

42. (c): Required angle = $\frac{16}{100} \times 360^\circ = 57.6^\circ$

43. (e): Required number of students = $5{,}500 \times \frac{10+18}{100} = 1{,}540$

44. (b): Students appeared in shift III & IV together of the examination = $5{,}500 \times \frac{(24+12)}{100} = 1{,}980$
Students appeared in shift I of the examination = $5{,}500 \times \frac{20}{100} = 1{,}100$
Required percentage = $\frac{1980-1100}{1100} \times 100 = 80\%$
Or, required percentage = $\frac{(24+12)-20}{20} \times 100 = 80\%$

45. (a): Students appeared in shift IV & VI together of the examination = $5{,}500 \times \frac{12+18}{100} = 1{,}650$
Students appeared in shift II & III together of the examination = $5{,}500 \times \frac{16+24}{100} = 2{,}200$
Required ratio = $\frac{1650}{2200} = 3:4$
Or required ratio = $\frac{(12+18)}{(16+24)} = 3:4$

46. (e): Students appeared in shift I & VI together of the examination = $5{,}500 \times \frac{20+18}{100} = 2{,}090$
Students appeared in shift III & V together of the examination = $5{,}500 \times \frac{10+24}{100} = 1{,}870$
Required difference = $2090 - 1870 = 220$

47. (a): ATQ,
Let quantity of milk and water in the vessel initially be 7x liters & x liters respectively.
ATQ,
$\left(7x - 24 \times \frac{7x}{8x}\right) = 56$
$x = 11$

48. (d): Let time taken by B alone to complete the work be x days.
So, time taken by A alone to complete the same work = $(x - 7.5)$ days
ATQ,
$\frac{1}{x-7.5} + \frac{1}{x} = \frac{1}{9}$
$x = 3, \frac{45}{2}$
x cannot be 3 as time taken by A alone cannot be negative.
Required time = $\frac{1 \times \frac{2}{9}}{\frac{1}{\frac{45}{2}}}$
= 5 days

49. (b): Let ages of A & B, 4 years later be 8x years & 9x years respectively.
ATQ,
$(8x - 4) + (9x - 4) = 47 \times 2$
$17x = 102$
$x = 6$ years
Required difference = $9x - 8x = 6$ years

50. (a): Let total students in the school be 100x.
So, number of students went on the picnic = 39x
And, number of boys went on the picnic = $75x \times \frac{32}{100}$ = 24x
So, number of girls went on the picnic = $39x - 24x$ = 15x
Required percentage = $\frac{15x}{25x} \times 100 = 60\%$

51. (e): Total number of students in section A = $\left(240 \times \frac{100}{60}\right) = 400$
Total number of students in section B = $\left(210 \times \frac{100}{70}\right) = 300$
Required difference = $400 - 300 = 100$

52. (a): **I.** $x^2 + 9x + 20 = 0$
$x^2 + 5x + 4x + 20 = 0$
$x(x + 5) + 4(x + 5) = 0$
$(x + 5)(x + 4) = 0$
$x = -4, -5$
II. $8y^2 - 15y + 7 = 0$
$8y^2 - 8y - 7y + 7 = 0$
$8y(y - 1) - 7(y - 1) = 0$
$(y - 1)(8y - 7) = 0$
$y = 1, \frac{7}{8}$
So, $x < y$.

53. (b): **I.** $x^2 - 11x + 30 = 0$
$x^2 - 6x - 5x + 30 = 0$
$x(x - 6) - 5(x - 6) = 0$
$(x - 6)(x - 5) = 0$
$x = 5, 6$
II. $y^2 + 12y + 36 = 0$
$y^2 + 6y + 6y + 36 = 0$
$y(y + 6) + 6(y + 6) = 0$
$(y + 6)(y + 6) = 0$
$y = -6$
So, $x > y$.

54. (c): **I.** $x^2 + 13x + 40 = 0$
$x^2 + 8x + 5x + 40 = 0$
$x(x + 8) + 5(x + 8) = 0$
$(x + 8)(x + 5) = 0$
$x = -8, -5$
II. $y^2 + 7y + 10 = 0$
$y^2 + 5y + 2y + 10 = 0$
$y(y + 5) + 2(y + 5) = 0$
$(y + 5)(y + 2) = 0$
$y = -2, -5$
So, $x \leq y$.

55. (b): **I.** $x^2 - 20x + 91 = 0$
$x^2 - 13x - 7x + 91 = 0$
$x(x - 13) - 7(x - 13) = 0$
$(x - 13)(x - 7) = 0$
$x = 7, 13$
II. $y^2 + 16y + 63 = 0$
$y^2 + 9y + 7y + 63 = 0$
$y(y + 9) + 7(y + 9) = 0$
$(y + 9)(y + 7) = 0$
$y = -7, -9$
So, $x > y$.

56. (e): **I.** $x^2 - x - 12 = 0$
$x^2 - 4x + 3x - 12 = 0$
$x(x - 4) + 3(x - 4) = 0$
$(x - 4)(x + 3) = 0$
$x = 4, -3$
II. $y^2 + 5y + 6 = 0$
$y^2 + 3y + 2y + 6 = 0$
$y(y + 3) + 2(y + 3) = 0$
$(y + 3)(y + 2) = 0$
$y = -2, -3$
So, *no relation.*

57. (b): Required number of students = $(700 \times 3) - (720 + 900) = 480$

58. (c): Number of girls in school – A & B together in 2000 = 450 + 180 = 630
Total number of students in school – B & C together in 2000 = 600 + 400 = 1000
Required percentage = $\frac{1000-630}{1000} \times 100 = 37\%$

59. (a): Required number of boys = $(720 - 360) + (360 - 180) + (450 - 270)$
$= 360 + 180 + 180$
$= 720$

60. (b): Average number of students in school – A, B & C in 1999 = $\frac{1}{3} \times (720 + 360 + 450) = 510$
Required percentage = $\frac{510}{600} \times 100 = 85\%$

61. (d): Required ratio = $\frac{600-180}{400-120}$
$= \frac{420}{280} = 3:2$

62. (b): Total number of girls in school – A, B & C together in 1999 = (360 + 180 + 270) = 810
Total number of girls in school – A, B & C together in 2000 = (450 + 180 + 120) = 750
Required difference = 810 − 750= 60

63. (a): **Quantity I:**
Required profit = $450 \times \frac{20}{120}$ = Rs.75
Quantity II:
Required cost price = $84 \times \frac{100}{120}$ = Rs.70
So, Quantity I > Quantity II.

64. (b): **Quantity I:**
Required female = $1152 \times \frac{100}{30} \times \frac{40}{60} \times \frac{100-25}{100}$ = 1920
Quantity II:
1940
So, Quantity I < Quantity II.

65. (b): **Quantity I:**
ATQ,
$\frac{P \times 12 \times 2}{100} = 1200$
$P = 5{,}000$ Rs.
Quantity II:
Rs.6,000
So, Quantity I < Quantity II.

66. (e): Let breadth of the field be x m.
So, length of the field = $(x + 4)$ m
Area of a rectangular field = $\frac{288}{3} = 96$ m^2
ATQ, $x(x + 4) = 96$
$x^2 + 4x - 96 = 0$
$x^2 + 12x - 8x - 96 = 0$
$x(x + 12) - 8(x + 12) = 0$
$(x + 12)(x - 8) = 0$
$x = 8, -12$
Quantity I:
Length of rectangular field = 12m
Quantity II: 12 m
So, Quantity I = Quantity II.

67. (b): **Quantity I:**
Let present age of Prashant be x years.
So, present age of Shivam = $(x + 8)$ years
$x + 8 + x = 32$
$x = 12$ years
Quantity II:
15 years
So, Quantity I < Quantity II.

68. (a): Profit sharing ratio of A, B & C = (4000 × 12) : (4000 +1000) × 12 : (3000 × 4)
= 48000 : 60000 : 12000
= 4 : 5 : 1
Let total profit be Rs. P
ATQ,
$\frac{1}{(4 + 5 + 1)} \times P = 700$
P = Rs. 7000

69. (d): Let speed of train be 'V' m/sec'
And let length of platform be 'l meters.
ATQ, $\frac{l + 440}{80} = V$ ... (i)
And,
$\frac{440}{22} = V + 3$
$\Rightarrow V = 17$ ... (ii)
Put value of (ii) in (i),
$\frac{l + 440}{80} = 17$
l = 1360 – 440
l = 920 m

70. (d): ATQ,
$2160 = 3600 \times \frac{75}{100} \times \frac{(100 - x)}{100}$
2160 = 2700 – 27x
27x = 540
x = 20
So, required amount = $2160 \times \frac{100}{120}$ = Rs. 1800

71. (e): Possible cases = 1 green ball or 2 green balls
Required probability = $\frac{{}^5C_1 \times {}^{10}C_1}{{}^{15}C_2} + \frac{{}^5C_2}{{}^{15}C_2}$
$= \frac{5 \times 10}{{}^{15}C_2} + \frac{10}{{}^{15}C_2} = \frac{50}{105} + \frac{10}{105}$
$= \frac{60}{105} = \frac{4}{7}$

72. (a): Let speed of stream be x km/hr.
So, speed of boat in still water = 6x km/hr.
ATQ,
$\frac{210}{7}$ = (6x - x)
$\Rightarrow$ 5x = 30
x = 6 km/hr
So, required downstream speed of boat = (6x + x)
= 7x = 42 km/hr

73. (b): Let width of rectangle A be '4x meters'
So, length of rectangle A = $4x \times \frac{125}{100}$ = 5x meters
ATQ,
$4x \times 5x = 1280$
$20x^2 = 1280$
$x^2 = 64$
x = 8
Hence, side of square = 2 × 8 = 16 cm
Required perimeter = 4 × 16 = 64 cm

74. (d): Required average = $53 - \frac{[(49+57)-(45+52)]}{45}$
$= 53 - \frac{9}{45}$
= 52.80 kg

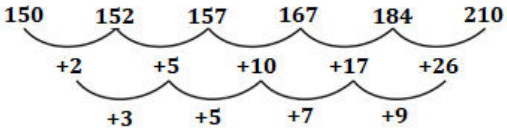
75. (e): Missing number = 5760
Pattern of series –
$1.5 \times 2 = 3$
$3 \times 4 = 12$
$12 \times 6 = 72$
$72 \times 8 = 576$
$576 \times 10 = 5760$

76. (b): Missing number = 56
Pattern of series –
$80 - 14 = 66$
$66 + 19 = 85$

$85 - 24 = 61$
$61 + 29 = 90$
$90 - 34 = 56$

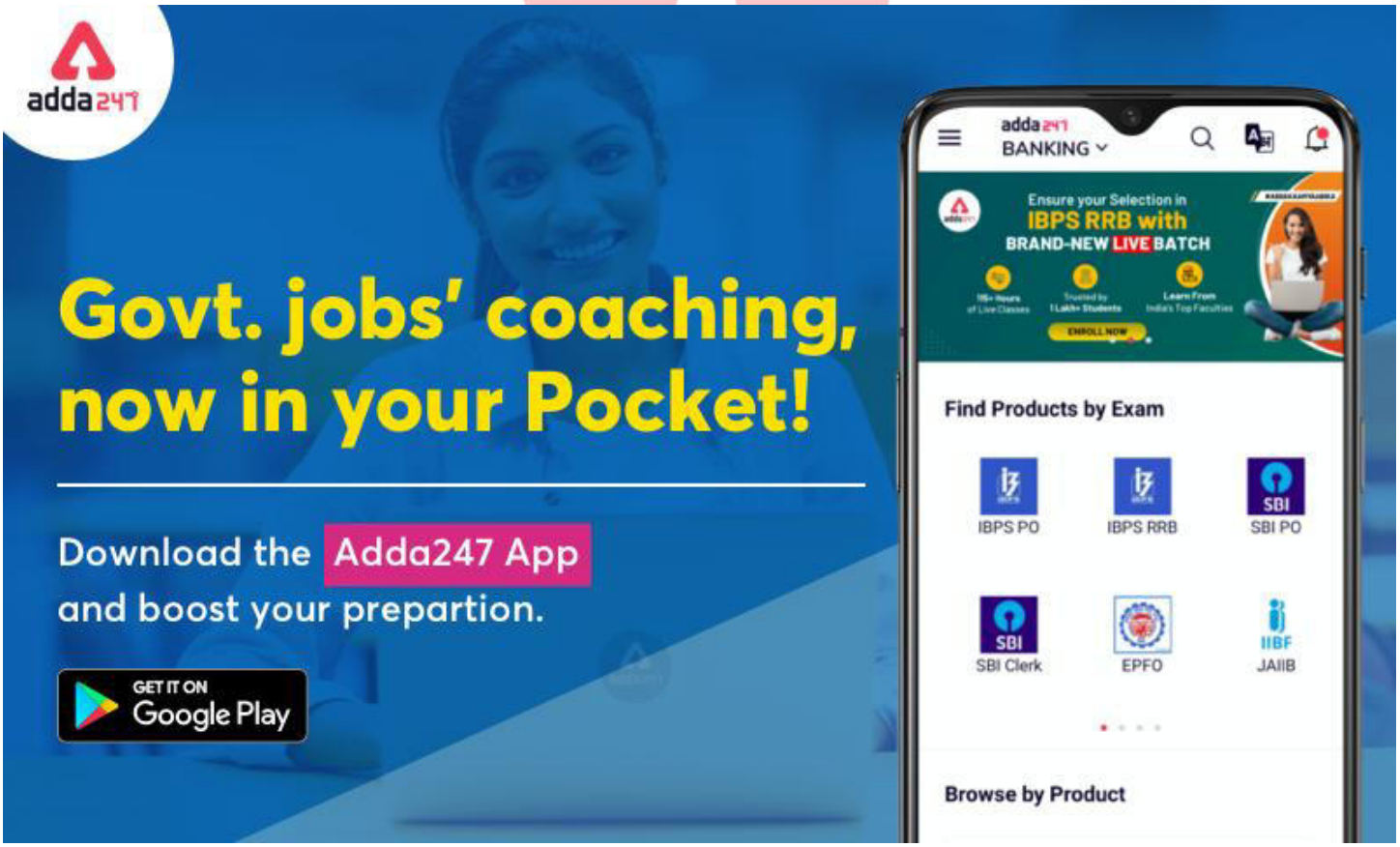
77. (b): Missing number = 83
Pattern of series –
$163 - 80 = 83$
$83 - 40 = 43$
$43 - 20 = 23$
$23 - 10 = 13$
$13 - 5 = 8$

78. (d): Missing number = 210
Pattern of series –



79. (a): Missing number = 95
Pattern of series –
$3.5 \times 1 - 1 = 2.5$
$2.5 \times 2 - 2 = 3$
$3 \times 3 - 3 = 6$
$6 \times 4 - 4 = 20$
$20 \times 5 - 5 = 95$

80. (b): Missing number = 2100
Pattern of series –
?= $6300 \div 3 = 2100$
$2100 \div 4 = 525$
$525 \div 5 = 105$
$105 \div 6 = 17.5$
$17.5 \div 7 = 2.5$



REASONING ABILITY

Directions (1-5): Study the following information carefully and answer the questions given below:

Eight persons i.e. D, Q, G, H, K, S, E and W are sitting around a square table in such a way that four persons sit at the corner side of the table and other four persons sit in the middle side of the table. The persons who sit at the corner side are facing away from the center and the persons who sit in the middle side are facing towards the center. D sits at the corner side of the table. One person sits between D and G. Q sits third to the right of G. Three persons sit between Q and E. W sits second to the right of E. W is not an immediate neighbour of D. H sits second to the right of K.

1. Who among the following sits second to the right of S?
(a) Q (b) E
(c) D (d) W (e) None of these

2. How many persons sit between D and W when counted from the right of D?
(a) Three (b) Four
(c) One (d) Two (e) None of these

3. Who among the following sits second to the left of G?
(a) D (b) K
(c) H (d) S (e) None of these

4. Who among the following are the immediate neighbours to each other?
(a) K, E (b) Q, D
(c) G, H (d) W, S (e) None of these

5. Four of the following five are alike in a certain way and hence form a group. Find the one who does not belong to that group?
(a) E (b) D
(c) G (d) K (e) H

Directions (6-9): Study the following sequence of numbers and alphabets and answer the given questions-
P 4 S A W 5 8 F 9 1 R E 7 2 O 3 7 5 1 B 6 K G N

6. How many numbers are there which are immediately preceded by a vowel?
(a) One (b) None
(c) Two (d) Three (e) None of these

7. If all the numbers are removed from the given series, then which among the following element is seventh from the right end?
(a) E (b) O
(c) F (d) R (e) None of these

8. If all the consonants are removed from the given series, then which among the following element is ninth from the left end?
(a) 2 (b) O
(c) 3 (d) 7 (e) None of these

9. Which among the following element is fifth to the left of twelfth element from the left end?
(a) F (b) 8
(c) 9 (d) 1 (e) None of these

Directions (10-12): Study the following information carefully and answer the questions given below:

Five persons A, B, C, D and E have different heights. Less than two persons are shorter than D. As many persons are taller than D as shorter than C. A is taller than B but shorter than E. B is not the shortest person. The height of third tallest person is 86 cm.

10. If the height of shortest person is 68 cm, then what may be the height of B?
(a) 69 cm
(b) 81 cm
(c) 78 cm
(d) All the given heights
(e) None of these

11. How many persons are taller than C?
(a) None (b) One
(c) Two (d) Three (e) None of these

12. Who among the following is just shorter than E?
(a) None (b) C
(c) A (d) D (e) None of these

Directions (13-16): In each of the questions below are given some statements followed by some conclusions. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

13. Statements: All Greens are Yellows. No Yellows are Black.
Conclusions: **I.** No Greens are Black.
II. Some Greens are Black.
(a) If only conclusion I follows.
(b) If only conclusion II follows.
(c) If either conclusion I or II follows.
(d) If neither conclusion I nor II follows.
(e) If both conclusions I and II follow.

14. Statements: All Chairs are Sofas. Only a few Sofas are Beds. No Beds are Curtains.
Conclusions: I. Some Sofas are not Beds.
II. Some Sofas are not Curtains.
(a) If only conclusion I follows.
(b) If only conclusion II follows.
(c) If either conclusion I or II follows.
(d) If neither conclusion I nor II follows.
(e) If both conclusions I and II follow.

15. Statements: Only a few Coffee are Tea. All Tea is Drinks. Only a few Drinks are Cold drinks.
Conclusions: I. Some Tea is not Cold drinks.
II. No Coffee are Drinks.
(a) If only conclusion I follows.
(b) If only conclusion II follows.
(c) If either conclusion I or II follows.
(d) If neither conclusion I nor II follows.
(e) If both conclusions I and II follow.

16. Statements: All Flowers are Trees. Only a few Trees are Gardens. No Gardens are Lawns.
Conclusions: I. All Lawns can never be Trees
II. Some Flowers can be Gardens
(a) If only conclusion I follows.
(b) If only conclusion II follows.
(c) If either conclusion I or II follows.
(d) If neither conclusion I nor II follows.
(e) If both conclusions I and II follow.

Directions (17-21): Study the following information carefully and answer the questions given below:
Seven persons A, B, C, D, E, F and G are sitting in row and all are facing towards north but not necessarily in the same order. B sits second from one of the extreme ends. Three persons sit between D and B. Two persons sit between D and A. C sits to the immediate left of A. F sits to left of C but is not an immediate neighbour of C. More than two persons sit between F and E.

17. How many persons sit to the left of F?
(a) Two (b) None
(c) One (d) Three (e) None of these

18. Who among the following sits third to the right of G?
(a) E (b) C
(c) B (d) F (e) None of these

19. Who among the following persons sit at the extreme ends?
(a) F, A (b) A, E
(c) G, E (d) F, E (e) None of these

20. How many persons sit between D and E?
(a) Two (b) Four
(c) Three (d) One (e) None of these

21. Who among the following sits to the immediate left of E?
(a) G (b) A
(c) B (d) D (e) None of these

Directions (22-23): Study the following information carefully and answer the questions given below:
Point D is 10m north of point P. Point Y is 14m east of point D. Point Q is 8m north of point Y. Point S is 20m west of point Q. Point H is 8m south of point S.

22. What is the shortest distance between point H and point D?
(a) 8m (b) 6m
(c) 4m (d) 10m (e) None of these

23. In which direction is point P with respect to point Q?
(a) South east (b) North west
(c) South west (d) North east (e) None of these

Directions (24-27): Study the following information carefully and answer the questions given below:
There are certain number of persons sitting in a row facing towards north direction. A sits fifth to the right of B. Two persons sit between C and B. D sits fourth to the left of C. Four persons sit to the left of D. The number of persons sit between D and B is same as the number of persons sit between B and F. F sits at fourth position from one of the extreme ends.

24. How many persons sit between B and D?
(a) None (b) Six
(c) Five (d) Four (e) None of these

25. How many persons sit in the row?
(a) Twenty (b) Twenty-one
(c) Twenty-two (d) Nineteen (e) None of these

26. Who among the following sits second to the right of A?
(a) None (b) C
(c) D (d) F (e) None of these

27. How many persons sit to the right of B?
(a) Nine (b) Ten
(c) Eight (d) Eleven (e) None of these

28. How many such pairs of letters are there in the meaningful word 'MATCHES' each of which has as many letters between them in the word as in the English alphabet (From both backward and forward)?
(a) Two
(b) One
(c) More than three
(d) Three
(e) None of these

Directions (29-33): Study the following sequence carefully and answer the given questions.
COT IVY PEA FOX MRU

29. If we add 'L' after first letter in every word, then how many meaningful words will be formed?
(a) None (b) Three
(c) Two (d) One (e) None of these

30. If third letter of each word is replaced by its succeeding letter according to English alphabetical order, then in how many words vowels will appear more than once?
(a) Two (b) One
(c) None (d) Three (e) None of these

31. If all the words are arranged according to English alphabetical order from left to right, then which word will appear fourth from the left end?
(a) MRU (b) FOX
(c) PEA (d) IVY (e) None of these

32. If all the letters are arranged according to English alphabetical order within each word, then in how many words vowel will appear at second position?
(a) One (b) None
(c) Two (d) Three (e) None of these

33. How many letters are there in English alphabetical series between the first letter of the second word from the left end and third letter of the third word from the right end?
(a) Five (b) Six
(c) Seven (d) Four (e) None of these

34. If in the number '35982476', 1 is added to each even digit and 2 is subtracted from each odd digit, then which digits will not appear twice in the number thus obtained?
(a) Only 1
(b) Only 9
(c) Both '1' and '9'
(d) Only 5
(e) None of these

Directions (35-39): Study the following information carefully and answer the questions given below:
Six people P, Q, R, S, T and U have events on different dates 7th and 12th of different months i.e. January, February and March. D has event on even numbered date in the month having 31 days. The number of persons have event before D is same as the number of persons have event after A. One person has event between A and C. F has event before C. B has event just before E.

35. How many persons have event before B?
(a) Two (b) None
(c) Three (d) One (e) None of these

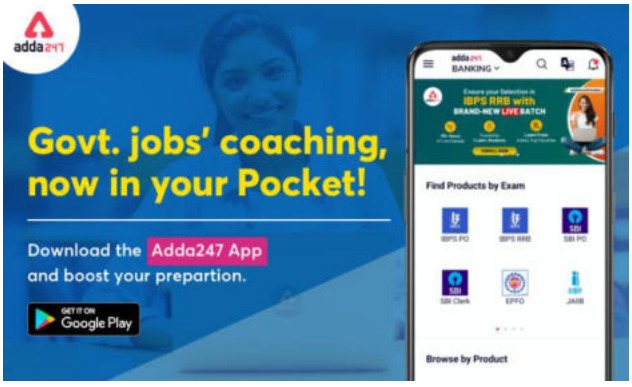
36. Who among the following has event just after D?
(a) C (b) None
(c) B (d) F (e) None of these

37. How many persons have event between F and D?
(a) One (b) Three
(c) None (d) Two (e) None of these

38. E has event on which among the following date?
(a) 12th February (b) 12th March
(c) 7th March (d) 7th January (e) None of these

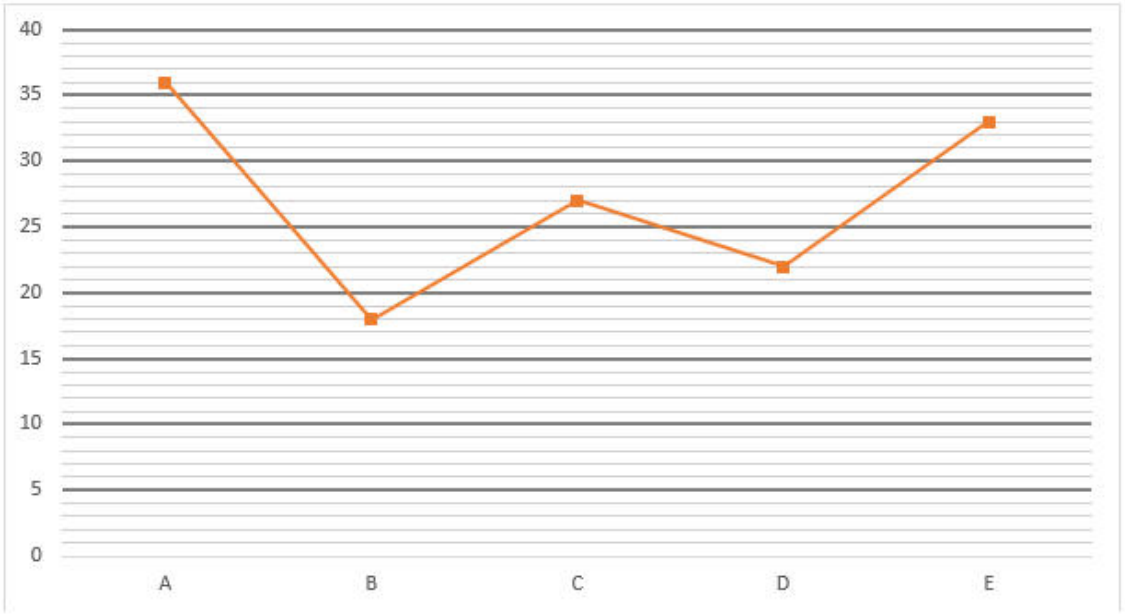
39. Four of the following five are alike in a certain way and hence form a group. Which is the one that does not belong to that group?
(a) A, F (b) E, F
(c) F, C (d) E, B (e) C, B

40. Four of the following five are alike in a certain way and hence form a group. Which is the one that does not belong to that group?
(a) RUY (b) SQO
(c) OMK (d) FDB (e) YWU



Quantitative Aptitude

Directions (41-45): Line graph given below shows number of passengers travelling in five (A, B, C, D & E) different compartment of a trains. Read the data carefully and answer the questions.



41. Total passengers in E are what percent less than total passengers in A?
(a) 6 ¼ % (b) 8 ⅓%
(c) 6 ⅓% (d) 6 ⅔% (e) 5%

42. Find average number of passengers in A, C & E?
(a) 32 (b) 30
(c) 36 (d) 33 (e) 27

43. Find the ratio of total passenger in B to that of in D?
(a) 7 : 9 (b) 9 : 10
(c) 11 : 9 (d) 9 : 13 (e) 9 : 11

44. Total passenger in C and E together are what percent more than total passenger in A?
(a) 33 ⅓% (b) 66 ⅔%
(c) 66 ⅓% (d) 50% (e) 60%

45. Find total number of passengers traveling in B, C & D together?
(a) 69 (b) 65
(c) 67 (d) 63 (e) 71

Directions (46-50): What will come in the place of question (?) mark in following questions.

46. 12, 12, 24, 72, ?, 1440
(a) 256 (b) 288
(c) 284 (d) 296 (e) 316

47. 16, 17.8, 21.4, 28.6, 43, ?
(a) 69.8 (b) 72.8
(c) 73.8 (d) 70.8 (e) 71.8

48. 12, 7, 8, 13, ?, 68.5
(a) 28 (b) 27
(c) 26 (d) 27.5 (e) 26.5

49. 72, 79, 65, 93, ?, 149
(a) 36 (b) 31
(c) 33 (d) 37 (e) 35

50. 8, 9, 19, 58, 233, ?
(a) 1164 (b) 1166
(c) 1156 (d) 1152 (e) 1158

51. If the difference between the present age of P and Q is three years and the ratio between the age of P and Q after two years will be 5 : 4, then find the age of P after two years (in years)?
(a) 15 (b) 13
(c) 18 (d) 16 (e) 14

52. A and B both spend 30% of their income together which is equal to Rs. 26400. If income of A is 20% more than that of B, then find the income of B (in Rs.)?
(a) 52000 (b) 48000
(c) 40000 (d) 36000 (e) 30000

53. If a man invests equal sum at the same rate of interest on simple interest for T and T+4 years and the respective ratio of interest gets by man is 1:2 respectively, then find 'T'?
(a) 6 (b) 2
(c) 5 (d) 3 (e) 4

54. 12 women can complete a work in 64 day, then find how many women will be required to complete 2/3 rd of the same work in 16 days?
(a) 28 (b) 24
(c) 36 (d) 32 (e) 48

55. A train running at the speed of 72 kmph crosses a pole in 30 seconds. Find the time taken by the same train to cross the pole with the speed of 54 kmph (in sec)?
(a) 42 (b) 48
(c) 54 (d) 45 (e) 40

56. The upstream speed and downstream speed of a boat is 10 kmph and 14 kmph respectively and boat travelled for T hours & 6 hours in upstream and downstream respectively. If the distance travelled in downstream is 44 km more than upstream, then find the value of 'T'
(a) 4 (b) 3
(c) 6 (d) 5 (e) 8

57. An article was marked up by 50% above cost price and allowed Rs 50 discount on marked price. If shopkeeper still made a profit of Rs. 50, then find the selling price of the article (in Rs.)?
(a) 350 Rs. (b) 300 Rs.
(c) 250 Rs. (d) 200 Rs. (e) 150 Rs.

58. A & B invested Rs. X and Rs. (X + 800) for same period of time in a business. If A gets Rs. 3200 as profit share out of total profit of Rs. 6800, then find 'X'?
(a) 7800 (b) 6000
(c) 8400 (d) 7200 (e) 6400

59. A vessel contains mixture of milk and water in the ration of 3 : 1 respectively. If 20 liters mixture taken out from the vessel and now the difference between milk and water in the remaining mixture is 70 liters, then find initial mixture in vessel (in liters)?
(a) 240 (b) 160
(c) 120 (d) 80 (e) 180

60. Perimeter of a rectangle is 2 cm more than circumference of a circle and area of circle is 616 cm^2. If breath of rectangle is equal to radius of circle, then find length of rectangle (in cm)?
(a) 35 (b) 33
(c) 31 (d) 21 (e) 27

Directions (61-65): Table given below shows number of orders received by three (P, Q & R) companies of their three (A, B & C) items. Read the data carefully and answer the questions.

Companies	A	B	C
P	80	60	50
Q	40	70	90
R	80	100	30

61. Total orders of item A & B received by R is how much more than total orders of item B & C received by Q?
(a) 50 (b) 10
(c) 40 (d) 20 (e) 30

62. Find total orders (all three items) received by R is what percent more than that of total orders (all three items) received by Q?
(a) 5% (b) 12.5%
(c) 10% (d) 15% (e) 20%

63. Find ratio of total orders of item A & B received by P to total orders of item B & C received by Q?
(a) 7 : 9 (b) 8 : 7
(c) 4 : 7 (d) 5 : 6 (e) 7 : 8

64. Find average number of orders of item B received by Q & R is what percent of total orders of item A received by P?
(a) 104 ¼ % (b) 106 ¼ %
(c) 108 ¼ % (d) 102 ¼ % (e) 110 ¼ %

65. Find total orders of item A, B & C received by P?
(a) 210 (b) 220
(c) 190 (d) 180 (e) 200

Directions (66-80): What should come in place of question mark (?) in following questions?

66. (48% of 625) ÷ 0.75 = ?
(a) 800 (b) None of these
(c) 40 (d) 4000 (e) 400

67. $\frac{(4)^3+(18)^2}{7^2+121-73}=?$
(a) 1 (b) 2
(c) 4 (d) 5 (e) 3

68. $(4)^? \times 2 = \frac{(16)^2}{\sqrt[4]{16}}$
(a) 2 (b) 3
(c) 4 (d) 1 (e) None of these

69. $4 \times (? + 120) = (8)^3$
(a) 6 (b) 12
(c) 8 (d) 4 (e) 16

70. ? + 432 – 205 = 550
(a) 384 (b) 244
(c) 224 (d) 276 (e) 324

71. $12 \times 8 + (?)^2 = (14)^2$
(a) 10 (b) 12
(c) 8 (d) 6 (e) 9

72. 40% of 400 + ? % of 300 = 250
(a) 40 (b) 36
(c) 25 (d) 30 (e) 20

73. $\sqrt{441} \div 7 = ? - 180$
(a) 185 (b) 183
(c) 187 (d) 184 (e) 182

74. $\sqrt{576} - \sqrt{144} + \sqrt{729} = 36 + ?$
(a) 1 (b) 4
(c) 5 (d) 2 (e) 3

75. $119 + 41 + 9 = ?^2$
(a) 10 (b) 13
(c) 17 (d) 8 (e) 16

76. 12% (? + 100) = 18
(a) 40 (b) 50
(c) 30 (d) 100 (e) 60

77. $\frac{\sqrt[3]{1331}}{11} + \sqrt{81} + ? = 27$
(a) 19 (b) 18
(c) 17 (d) 16 (e) 15

78. $?^2 + \sqrt{400} = 6^2$
(a) 3 (b) 4
(c) 2 (d) 1 (e) 5

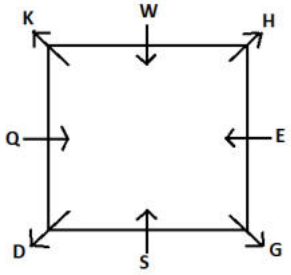
79. $9\frac{1}{3} + 7\frac{1}{2} = ? + 5\frac{1}{6} + 6\frac{1}{3}$
(a) 4 (b) 4 ½
(c) 5 (d) 5⅙ (e) 6

80. $(3^4 \times 9^7) \div 27^6 = 3^?$
(a) 2 (b) 3
(c) 0 (d) 6 (e) 7

Solutions

REASONING ABILITY

Directions (1-5):



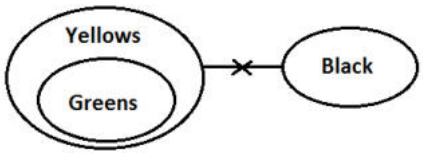
1. (b): 2. (d): 3. (c):
4. (b): 5. (a): 6. (c):
7. (d): 8. (a): 9. (b):

Directions (10-12):
C > E > A (86) > B > D

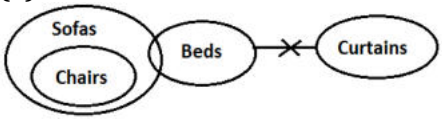
10. (d):
11. (a):
12. (c):

Directions (13-16):

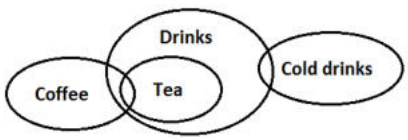
13. (a):



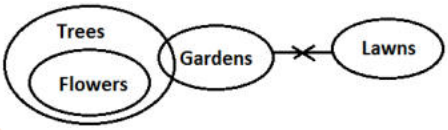
S14. (e):



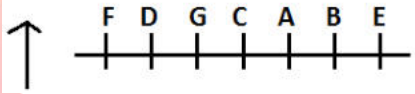
15. (d):



16. (b):



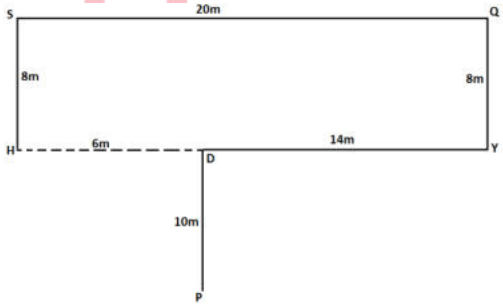
Directions (17-21):



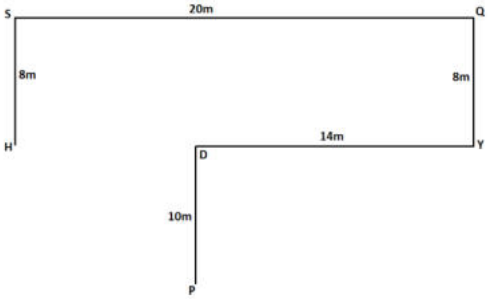
17. (b): 18. (c): 19. (d):
20. (b): 21. (c):

Directions (22-23):

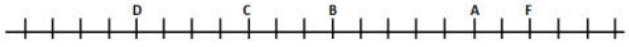
22. (b):



23. (c):

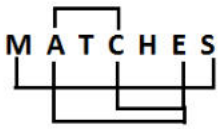


Directions (24-27):



24. (b): **25. (c):** **26. (d):**
27. (b):

28. (c):



Directions (29-33):

29. (c): **30. (b):** **31. (a):**
32. (d): **33. (c):**

34. (c): 3 5 9 8 2 4 7 6
1 3 7 9 3 5 5 7

Directions (35-39):

Months	7th	12th
January	A	F
February	C	B
March	E	D

35. (c): **36. (b):** **37. (b):**
38. (c): **39. (b):** **40. (a):**

Quantitative Aptitude

41. (b): Required percentage = $\frac{36-33}{36} \times 100$
$= \frac{3}{36} \times 100 = 8\frac{1}{3}\%$

42. (a): Required average = $\frac{36+27+33}{3} = 32$

43. (e): Required ratio = 18 : 22 = 9 : 11

44. (b): Total passenger in C and E = 27 + 33 = 60
Required percentage = $\frac{60-36}{36} \times 100$
$= \frac{24}{36} \times 100 = 66\frac{2}{3}\%$

45. (c): Required number of passengers = 18 + 27 + 22 = 67

46. (b): Pattern of series –
$12 \times 1 = 12$
$12 \times 2 = 24$
$24 \times 3 = 72$
$? = 72 \times 4 = 288$
$288 \times 5 = 1440$

47. (e): Pattern of series –
16 + 1.8 = 17.8
17.8 + 3.6 = 21.4
21.4 + 7.2 = 28.6
28.6 + 14.4 = 43
? = 43 + 28.8 = 71.8

48. (b): Pattern of series –
$12 \times 0.5 + 1 = 7$
$7 \times 1 + 1 = 8$
$8 \times 1.5 + 1 = 13$
$? = 13 \times 2 + 1 = 27$
$27 \times 2.5 + 1 = 68.5$

49. (d): Pattern of series –
72 + 7 = 79
79 – 14 = 65
65 + 28 = 93
? = 93 – 56 = 37
37 + 112 = 149

50. (b): Pattern of series –
$8 \times 1 + 1 = 9$
$9 \times 2 + 1 = 19$
$19 \times 3 + 1 = 58$
$58 \times 4 + 1 = 233$
$233 \times 5 + 1 = 1166$

51. (a): Let present age of Q = t years
So, present age of P = (t + 3) years
ATQ –
$\frac{t+2}{(t+3)+2} = \frac{4}{5}$
t = 10 years
So, Age of P after two years= (10 + 3) + 2 = 15 year

52. (c): Let total income of B = 100x Rs.
So, total income of A
$= 100x \times \left(1 + \frac{20}{100}\right) = 120x\ Rs.$
ATQ –
$(100x + 120x) \times \frac{30}{100} = 26400$
66x = 26400
x = 400 Rs.
So, income of B = $400 \times 100 = 40000\ Rs.$

53. (e): Let sum invested by man = Rs. X
And, rate of interest = r%
ATQ- $\frac{X \times r \times T}{X \times r \times (T+4)} = \frac{1}{2}$
$\frac{T}{(T+4)} = \frac{1}{2} \Rightarrow T = 4$

54. (d): Let total work = $12 \times 64 = 768$ units
Required women = $768 \times \frac{2}{3} \times \frac{1}{16} = 32$

55. (e): Let length of train be 'l' meters
ATQ –
$72 \times \frac{5}{18} = \frac{l}{30}$
l = 600 meters
Required time = $\frac{600}{54 \times \frac{5}{18}}$ = 40 sec

56. (a): ATQ –
$14 \times 6 - 10 \times T = 44$
10T = 40
T = 4

57. (c): Let cost price of article = 100x Rs.
So, marked price of article = $100x \times \left(1 + \frac{50}{100}\right) = 150x$ Rs.
And, selling price of article = (150x – 50) Rs.
ATQ –
(150x – 50) – 100x = 50
50x = 100
x = 2 Rs.
So, selling price of article = $(150 \times 2 - 50) = 250\ Rs.$

58. (e): ATQ –
$\frac{X}{(X+800)} = \frac{3200}{(6800-3200)}$
X = 6400

59. (b): Let total initial mixture in vessel = 4x
So, milk in vessel = 3x
And water in vessel = x
ATQ –
$(3x - 20 \times \frac{3x}{4x}) - \left(x - 20 \times \frac{x}{4x}\right) = 70$
(3x – 15) – (x – 5) = 70
2x = 80
x = 40
So, initial mixture in vessel = 4x = 4 × 40 = 160 liters

60. (c): Let radius of circle be 'r' cm
ATQ –
$\frac{22}{7} \times r \times r = 616$
r = 14 cm = breath of rectangle
Let length of rectangle be 'l' cm
Perimeter of rectangle = circumference of a circle + 2
$2(14 + l) = 2 \times \frac{22}{7} \times 14 + 2$
2(14 + l) = 90
l = 31 cm

61. (d): Required difference = (80 + 100) – (70 + 90) = 20

62. (a): Total orders (all three items) received by R = (80 + 100 + 30) = 210
Total orders (all three items) received by Q = (40 + 70 + 90) = 200
Required percentage = $\frac{210-200}{200} \times 100 = 5\%$

63. (e): Total orders of item A & B received by P = 80 + 60 = 140
Total orders of item B & C received by Q = 70 + 90 = 160
Required ratio = 140 : 160 = 7 : 8

64. (b): Average number of orders of item B received by Q & R = $\frac{70+100}{2} = 85$
Required percentage = $\frac{85}{80} \times 100 = 106\frac{1}{4}\%$

65. (c): Required sum = 80 + 60 + 50 = 190

66. (e): $\frac{48}{100} \times 625 \times \frac{4}{3} = ? \Rightarrow ? = 400$

67. (c): $\frac{64+324}{97} = ?$
$? = 4$

68. (b): $4^? \times 2 = \frac{256}{2}$
$4^? = 64$
$4^? = (4)^3$
? = 3

69. (c): $4 \times ? = 512 - 480$
$? = \frac{32}{4}$
? = 8

70. (e): ? + 432 – 206 = 550
? = 550 – 226
? = 324

71. (a): $(?)^2 = 196 - 96$
$?^2 = 100 \Rightarrow ? = 10$

72. (d): $\frac{40}{100} \times 400 + \frac{300}{100} \times ? = 250$
$160 + 3 \times ? = 250$
$? = \frac{90}{3} = 30$

73. (b): $\div 7 = ? - 180$
? = 183

74. (e): 24 – 12 + 27 = 36 + ?
?= 3

75. (b): $119 + 41 + 9 = ?^2$
? = 13

76. (b): $\frac{12}{100} \times (? + 100) = 18$
? = 150 – 100
? = 50

77. (c): $\frac{11}{11} + 9 + ? = 27$
1 + 9 + ? = 27
? = 17

78. (b): $?^2 + 20 = 36$
$?^2 = 16 \Rightarrow ? = 4$

79. (d): $? = 9\frac{1}{3} + 7\frac{1}{2} - 5\frac{1}{6} - 6\frac{1}{3}$
$? = 9 + 7 - 5 - 6\left(\frac{1}{3} + \frac{1}{2} - \frac{1}{6} - \frac{1}{3}\right)$
$? = 5\frac{1}{6}$

80. (c): $\frac{3^4 \times 3^{7\times2}}{3^{6\times3}} = 3^?$
$3^? = 3^{4+14-18}$
$3^? = 3^0$
? = 0

REASONING ABILITY

Direction (1-5): Study the following information carefully and answer the questions given below:

Eight persons i.e. P, Q, R, S, T, U, V, W attend meeting in different months i.e. January, March, April, May, July, August, September, October in same year but not necessarily in same order. Three persons attend meeting between T and P who attend meeting in the month of 30 days. W attend meeting before V and after R. There are as many persons attend meeting before P as after Q. U attend meeting before S and after Q. S attend meeting before V and after W who doesn't attend meeting in May.

1. Who among the following attend meeting in July?
(a) P (b) Q (c) R
(d) W (e) None of these

2. There are as many persons who attend meeting before W as after _____?
(a) P (b) Q (c) V
(d) R (e) None of these

3. How many persons attend meeting after U?
(a) Two (b) Three (c) Four
(d) One (e) None of these

4. In which of the following month V attend meeting?
(a) January (b) July (c) August
(d) October (e) None of these

5. Four of the following five are alike in certain way and hence form a group, find the one which does not belong to that group?
(a) R (b) Q (c) T
(d) U (e) W

Directions (6-8): In each of the questions below. Some statements are given followed by conclusions/group of conclusions. You have to assume all the statements to be true even if they seem to be at variance from the commonly known facts and then decide which of the given conclusions logically follow from the information given in the statements:
(a) If only conclusion I follows
(b) If only conclusion II follows
(c) If either I or II follows
(d) If neither I nor II follows
(e) If both I and II follows

6. **Statements:** All numbers are digits. All digits are fraction. No fraction is multiply.
Conclusions:
I. All multiply can be digit
II. Some fraction is number.

7. **Statements:** No words are letters. Some letters are alphabet. Only a few alphabets are sentence
Conclusions:
I. Some alphabets are not word.
II. Some sentence can be word.

8. **Statements:** Only e few river is lake. Some lake is mountain. All mountain is hill.
Conclusions:
I. Some rivers can be mountain.
II. Some lakes can be hill

9. In the word 'PLANTED', how many pairs of the letters have the same number of letters between them in the given word as they have in the English alphabet series?
(a) One (b) Two (c) Four
(d) Three (e) More than four

Direction (10-14): Study the following information carefully and answer the questions given below.

Eight persons are sitting around a circular table facing towards the center of the table. A sits second to the left of B. Only two persons sit between A and H. G sits third to the right of H. E sits immediate left of G. D sit second to the left of C. F sits third to the right of C.

10. Who among the following sits second to the left of H?
(a) C (b) D (c) B
(d) F (e) None of these

11. Who among the following faces D?
(a) A (b) H (c) E
(d) G (e) None of these

12. Four of the following five are alike in a certain way and hence form a group which of the following does not belong to the group?
(a) H-C (b) F-H (c) B-A
(d) A-G (e) G-F

13. Which of the following is true regarding B?
(a) B sits third left of D
(b) B is an immediate neighbor of F
(c) B faces G
(d) Both (a) and (b)
(e) Both (a) and (c)

14. How many persons sit between H and E when counted from right of H?
(a) None (b) One (c) Two
(d) Three (e) More than three

Direction (15-19): Following questions are based on the five words given below, Study the following numbers and answer the following question:

BOY CAT RAT MAT SIT PEN

15. If the vowel in each of the given words is changed to its next letter and each consonant is changed to its previous letter according to the English alphabetical series, then in how many words there are repeated letters?
(a) One (b) Two (c) Three
(d) Four (e) Five

16. How many letters are there between the first letter of the second word from left and first letter of the third word from right end in English alphabetical series?
(a) Eight (b) Six (c) Seven
(d) Five (e) More than eight

17. If the words are arranged according to the English dictionary from left to right then which of the following word is second from the left end?
(a) BOY (b) SIT (c) CAT
(d) RAT (e) None of these

18. If all the letters in each word are arranged according to the English alphabetical series from left to right, then how many meaningful words are formed?
(a) One (b) Two (c) Three
(d) Five (e) Four

19. If the first letter is interchanged with the third letter within the word then how many words starts with a vowel?
(a) None (b) One (c) Two
(d) Three (e) More than three

20. In the given number '69286257', If all digits are arranged in increasing and decreasing order in 1st and 2nd arrangement respectively from left to right, then how many digits are remains the same position in both new arrangement?
(a) Three (b) Two (c) None
(d) One (e) None of these

Direction (21-23): Study the following information carefully and answer the questions given below:

There are eight members of three generations are living in a family. F is grandfather of G who is child of A. B and D are siblings of E who is only son of F. H is only grandson of F. C is spouse of B who have only one child. G is child of D.

21. How many male members are in the family?
(a) Three (b) Four (c) Five
(d) Six (e) Can't be determined

22. How G is related to E?
(a) Daughter (b) Son (c) Nephew
(d) Niece (e) Can't be determined

23. If P is spouse of F, then how P is related to B?
(a) Father (b) Son (c) Mother
(d) Aunt (e) Can't be determined

24. In the word 'Creation', if all the letters are arranged in alphabetical increasing order from left to right, then how many letters are remains in the same position?
(a) Only 'N'
(b) Both 'A' and 'T'
(c) Only 'E'
(d) Both 'C' and 'O'
(e) None of these

Direction (25-29): Study the following information carefully and answer the questions given below:

Ten persons are sitting in two rows. In row 1, A, B, C, D, E are sitting, and they are facing North. In row 2, P, Q, R, S, T are sitting, and they are facing South. Each person sitting in row 1 is facing another person sitting in row 2. All information is not necessarily in same order.
Two persons sit between P and R who faces A. D sits 2nd to the right of C who doesn't sit next to A. E faces T who sits immediate left of R. B faces the person who sits immediate left of Q.

25. Who among the following faces the person who sits immediate right of S?
(a) C (b) D (c) A
(d) B (e) None of these

26. How many persons sit to the left of B?
(a) Two (b) Three (c) Four
(d) One (e) None

27. Which of the following is true?
(a) D faces Q
(b) Two persons sit between S and T
(c) No person sits left of B
(d) Both A and C sit at extreme end
(e) None is true

28. What is the position of B with respect to A?
(a) Immediate left
(b) Immediate right
(c) 2nd to the right
(d) 2nd to the left
(e) None of these

29. If A is related to T, E is related to Q then, in the same manner C is related to ____?
(a) P (b) R (c) S
(d) B (e) None of these

Direction (30-32): Study the following information carefully and answer the questions given below:

Ramesh goes to his office from point M. He walks 8m in east and reaches at point N. Then, he turns his left and walk 4m to reach at point O. Now, he turns to his right and walk 5m to reach at point P. Again, he turns to his right and walk 8m to reach at point Q. Again, he turns to his right and walk 5m to reach at point R. Then, he turns to his left and walk 5m to reach at point S. finally, he turns to his right and walk 8m to reach his office.

30. What is the direction of point P with respect to point S?
(a) South-east (b) North-east (c) North
(d) South (e) None of these

31. Which of the following points are in straight line?
(a) P, O, S (b) N, O, S (c) P, N, Q
(d) M, N, S (e) None of these

32. Ramesh's office is in which direction with respect to point M?
(a) North (b) North-west (c) South-east
(d) South (e) None of these

Direction (33-35): In each of the questions below are given some statements followed by two conclusions. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.
(a) If only conclusion I follows.
(b) If only conclusion II follows.
(c) If either conclusion I or II follows.
(d) If neither conclusion I nor II follows.
(e) If both conclusions I and II follow.

33. **Statements:** V>B≥G=H>F<D≤T, Q<W=E≤F
Conclusion: I: B>W **II:** E≥B

34. **Statements:** M<N=B≤V>C, L>K≥J=H≥B
Conclusion: I: N≤H **II:** B>J

35. **Statements:** P=L>O≥K>U>M, N<H≤M=B<K
Conclusion I: L>B **II:** N<U

Quantitative Aptitude

Direction (36-40): Find the wrong number in following number series.

36. 2, 6, 12, 48, 240, 1440, 10080
(a) 12 (b) 6 (c) 2
(d) 48 (e) 240

37. 5, 9, 25, 59, 125, 225, 369
(a) 369 (b) 225 (c) 25
(d) 59 (e) 9

38. 540, 550, 575, 585, 608, 620, 645
(a) 608 (b) 550 (c) 575
(d) 645 (e) 585

39. 4, 11, 30, 67, 128, 221, 346
(a) 11 (b) 4 (c) 221
(d) 67 (e) 346

40. 189, 186, 181, 174, 165, 155, 141
(a) 189 (b) 181 (c) 165
(d) 155 (e) 141

41. Average of 10 numbers is 35. If average of first 5 numbers is 40 and average of last 3 numbers is 22, then what is the average of remaining two numbers?
(a) 36 (b) 32 (c) 40
(d) 42 (e) 44

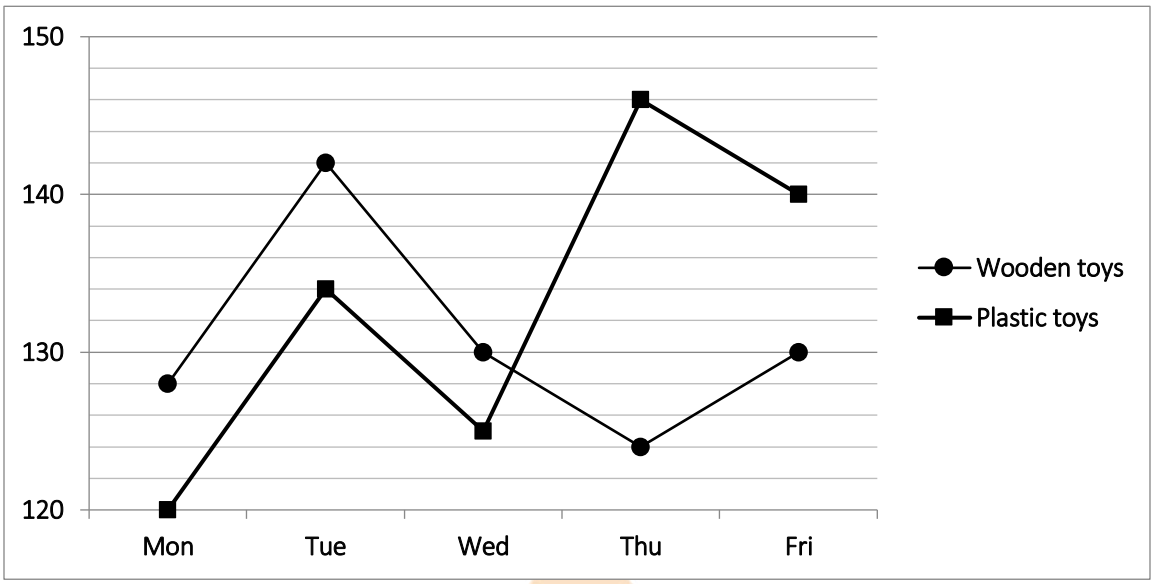
42. Difference between downstream speed and upstream speed is 4 kmph. If speed of boat in still water is 7 times the speed of current, then what is the time taken by the boat to cover 48 km in downstream?
(a) 6 hours (b) 5 hours (c) 4 hours
(d) 2 hours (e) 3 hours

43. A shopkeeper gives 20% discount on a book and he still earns a profit of $33\frac{1}{3}$% on the book. If cost price of book is Rs.600, then what is the discount given on the book? (in Rs.)
(a) 200 (b) 100 (c) 300
(d) 250 (e) 150

44. Ratio of present age of A to B is 4 : 3. If C is 4 years younger to B and difference between present age of A and B is 4 years, then what is C's age 10 years hence?
(a) 12 years (b) 22 years (c) 18 years
(d) 20 years (e) 24 years

45. A train X travelling at 15 m/sec crosses another train Y travelling in opposite direction at 72 kmph in 15 seconds. Find the length of train X which is twice of that of train Y?
(a) 400 m (b) 300 m (c) 350 m
(d) 450 m (e) 500 m

Directions (46-50): Given below is the line graph which shows the numbers of wooden toys and plastics toys sold in 5 different days of the week. Read the given information carefully and answer the following questions.
Total toys=Wooden toys + Plastic toys



46. Find the difference between total toys sold on Monday and on Wednesday?
(a) 10 (b) 8 (c) 9
(d) 7 (e) 5

47. Total Plastic toys sold on Tuesday and Friday together is what percent more or less than total Wooden toys sold on Wednesday and Friday together.
(a) $5\frac{3}{13}\%$ (b) $5\frac{5}{7}\%$ (c) $5\frac{4}{13}\%$
(d) $5\frac{5}{13}\%$ (e) $5\frac{4}{7}\%$

48. What is the average of Plastic toys sold on Tuesday, Wednesday and Friday?
(a) 131 (b) 133 (c) 132
(d) 130 (e) 138

49. Total toys sold on Thursday is what percent more or less than total toys sold on Friday?
(a) 12.5% (b) 10% (c) 0%
(d) None of these (e) 20%

50. What is number of Wooden toys purchased by female on Wednesday if ratio of Wooden toys sold to female to that of male on Wednesday is 7: 3? (if toys are sold only to male and female)
(a) 98 (b) 84 (c) 104
(d) 78 (e) 91

Direction (51-65): What will come in the place of question (?) mark?

51. 45% of 1600 + $?^2$= 1044
(a) 18 (b) 14 (c) 16
(d) 22 (e) 12

52. 22 % of 1500 + 22.5% of 1000 = ?
(a) 525 (b) 565 (c) 555
(d) 625 (e) 585

53. ? + $(8)^3 = (26)^2 - 43$
(a) 121 (b) 131 (c) 111
(d) 119 (e) 113

54. ? +820= 25 % of 6400
(a) 600 (b) 770 (c) 790
(d) 780 (e) 760

55. $? + 5\frac{1}{2} - 3\frac{1}{3} = 3$
(a) $\frac{1}{6}$ (b) $\frac{1}{3}$ (c) $\frac{5}{6}$
(d) $\frac{2}{3}$ (e) 1

56. $\sqrt{80\% \text{ of } 500 + 21 \times 4} + 18 = ?$
(a) 40 (b) 30 (c) 38
(d) 36 (e) 42

57. $2^3 \times 4^2 \div 8 = (2)^?$
(a) 3 (b) 5 (c) 4
(d) 6 (e) 2

58. $\frac{12}{13}$ of 143 ÷ 6 -12 = ?
(a) 8 (b) 10 (c) 12
(d) 11 (e) 14

59. 111 + 11 + 1111 + 11111 =?
(a) 12244 (b) 12334 (c) 12354
(d) 12345 (e) 12344

60. 75% of 300 –175 = 70 –?
(a) 40 (b) 25 (c) 10
(d) 30 (e) 20

61. $\left(\sqrt{64}+3\right)^3 = 750+?$
(a) 591 (b) 581 (c) 571
(d) 561 (e) 601

62. $\frac{\sqrt{36}\times\sqrt{64}}{4} = ?$
(a) 12 (b) 15 (c) 13
(d) 11 (e) 11.5

63. $\frac{9800}{45+20\times2-50} = ?$
(a) 300 (b) 290 (c) 275
(d) 270 (e) 280

64. $\frac{220\div20\times135\div15}{3} = ?$
(a) 33 (b) 35 (c) 34
(d) 32 (e) 31

65. $\frac{4\times?}{100}\times 210 + 225 = 351$
(a) 20 (b) 16 (c) 15
(d) 25 (e) 10

66. Area of a rectangle is 180cm^2 and difference between length and breadth of rectangle is 3cm. If breadth of rectangle is equal to the side of a square, then find perimeter of square?
(a) 44 cm (b) 52 cm (c) 48 cm
(d) 64 cm (e) 40 cm

67. A and B invested in the ratio of 3:2 respectively. They both invested for 6 months. If total profit is 5000 Rs., then find the profit share of B?
(a) 2000 Rs. (b) 2500 Rs. (c) 2400 Rs.
(d) 3000 Rs. (e) 1500 Rs.

68. The difference between total SI earned on Rs. 'P' at 12% p.a for 3 years and total CI earned on same sum at 15% p.a for 2 years when compounded annually is Rs. 375. Find P ? (in Rs.)
(a) 10000 (b) 15000 (c) 20000
(d) 5000 (e) 8000

69. Shivam alone and Deepak alone can finish a task in 6 hours and 10 hours respectively. Find the time taken by both of them together to do twice of the work?
(a) 8 hr (b) $7\frac{1}{2}$ hr (c) $7\frac{3}{4}$ hr
(d) 6 hr (e) $6\frac{2}{3}$ hr

70. In 48 liter of water, 40 liter of juice is mixed and then 50% of the mixture is taken out and then 'a' liter of juice is added again then ratio of water to that of juice becomes 4:5. Find value of 'a'?
(a) 10 liter (b) 8 liter (c) 12 liter
(d) 6 liter (e) 9 liter

English Language

Direction (71-76): Read the passage carefully and answer the questions based on the passage.

Marina was extremely afraid of the dark. When the lights went out, everything and every shadow appeared to her as the most terrible of monsters. Her parents explained to her, everyday and with great patience, that these things were not monsters. Marina understood her parents, but she could not stop feeling an awful fear whenever it was dark. One day her Aunt Valerie came to visit. Valerie was an incredible woman. She was famous for her courage, and for having gone on many journeys of adventure, some of which had been made into books and movies. Marina wanted to conquer her fear of the dark, so she asked her Aunt how she became so brave, and whether she had ever been frightened. "A great many times, Marina," answered her Aunt, "I remember when I was small and I was terribly afraid of the dark. I couldn't stay in the dark for even a moment".

Marina became very excited. How was it possible that someone so courageous could have been afraid of the dark? "I'll tell you a secret, Marina. It was some blind children who taught me how to be brave. They can't see, so if they had never discovered the secret of how not to be afraid of the dark, they would have been forever frightened". "It's true!" said Marina, intrigued, "Can you tell me that secret?" "Of course! The secret is to change your eyes. Since blind children can't see, their hands are their eyes. All you have to do to conquer your fear is what they do. Shut the eyes of your face and open the eyes of your hands. Let's make a deal: tonight, when you go to bed and put out the light, if anything makes you afraid, close your eyes, carefully get out of bed, and try to see what it is that's making you scared. But do it using your hands as eyes... and tomorrow tell me how you're getting on with the fear".

Marina accepted, but she was rather worried. She knew she would need to be brave to close her eyes and go and touch whatever it was that was frightening her; but she was willing to try because she was already too old for this. When her parents took her to bed, she herself put out the light. After a little while, she felt afraid of one of the shadows in the bedroom. Following the advice of Aunt Valerie, she closed the eyes of her face and _____(A)_____. And, summoning up all her courage, she went over to grab that mysterious shadow. The next morning Marina came running into the kitchen, a big smile on her face, and a song on her lips. "The monster is so soft and smooth!..." she cried,
"It's my teddy bear!"

71. How did Merina feel after receiving explanation in context of darkness from her parents?
(a) she became even more anxious due to her fear overpowering her
(b) she felt relaxed and was prepared to face her fear of darkness
(c) she woke up feeling happy next day, for not being afraid and overcoming her fear of darkness
(d) things didn't change and a gush of fear still ran through her every time when it was dark
(e) none of these

72. What was Aunt Valerie's stance regarding her childhood experiences of darkness?
(a) she had learnt to ignore her fear and focus on her studies
(b) she was never afraid of darkness which finally helped her become a courageous woman
(c) she too was scared of shadows and darkness and always wanted to stay in light
(d) all are correct
(e) none of these

73. The blind children overcome their fears by-
(a) they try to shut eyes of hands and open eyes of face
(b) using their hands to throw off what makes them afraid
(c) using their hands as their eyes so as to feel what they are afraid of
(d) putting their hands on their eyes so that they could not feel anything
(e) all are correct

74. Why was it necessary for blind children to learn not to be afraid of darkness?
(a) they were destined to be blind forever and spend their life without having any fears
(b) if they don't learn how not to be afraid of darkness, they would be scared throughout their life
(c) if they ever had opportunity to see again they must be able to recognize the things around them
(d) both (a) and (b)
(e) none of these

75. Why was Merina willing to use the technique told by Aunt Valerie?
(a) she wanted to make Aunt Valerie happy for trying to overcome her fear
(b) she wanted to face her fear and be courageous like her parents
(c) she was too old to be afraid of darkness
(d) she was constantly told to do so by her parents
(e) none of these

76. Which of the following phrases could fit in the blank (A) to make the statement grammatically correct and contextually meaningful?
(a) treated by experiencing shadows
(b) social gatherings would feel anxious
(c) fear passes from person to person
(d) opened the eyes of her hands
(e) none of these

Directions (77-79): Which of the following word/ phrase can replace the highlighted word, as used in the passage given above to infer the similar meaning?

77. Shadow
(a) gloom (b) interference (c) refraction
(d) mirage (e) reflection

78. Put Out
(a) blow out (b) switch off (c) extinguish
(d) smother (e) none of these

79. Grab
(a) obtain (b) gather (c) grasp
(d) achieve (e) purchase

Direction (80-84): Read the following sentences carefully, fill in the blanks with appropriate word from the given options.

80. The owl is standing on the tree_____ at the wall
(a) barking (b) sleeping (c) dancing
(d) looking (e) hawk

81. Rahul saw a monkey plucking blackberries from the tree and _____ them into the river
(a) drop (b) eating (c) dropping
(d) asking (e) divides

82. Honey bees_____ a sugary juice called nectar from the blossom by sucking it out with their tongues.
(a) collects (b) protecting (c) collect
(d) washes (e) wets

83. Sunidhi has been_____ for the government jobs for three years but could not clear any of the exams.
(a) study (b) prepare (c) prepared
(d) preparing (e) successful

84. The head of the monkey had been_____ away with the rifle.
(a) blows (b) blown (c) blew
(d) sharp (e) created

Directions (85-89): Read each of the following four sentences to find out whether there is any grammatical mistake/error in it. Choose the sentence with no grammatical error as the correct answer. If all the given sentences are grammatically incorrect, choose (e) i.e., "None of these" as an answer. If all the given sentences are grammatically correct then choose option (d) i.e., "All are correct".

85. (a) India urgently needs more ambitious structural and financial sector reform measures.
(b) The village was tore by rioters.
(c) The officer found thousands of polythene bags in the backyard over sweet shop.
(d) All are correct
(e) None of these

86. (a) Royal Enfield is eyeing global markets for apparel business.
(b) The IMF in January lowered India's economic growth estimate for the current fiscal year to 4.8 per cent.
(c) Permanent commission for women was restricted to only two departments.
(d) All are correct
(e) None of these

87. (a) I has no doubts about women officers handling responsibilities during a crisis.
(b) Soldiers respect professionalism, good leadership, irrespective of whether it is demonstrated by a male or female officers.
(c) There is some justification in not permitting women in combat roles at this time.
(d) All are correct
(e) None of these

88. (a) The percentage of stale items was very less.
(b) I can give you some useful informations.
(c) A looked at Indian contributions to mathematics shows the richness of the scientific tradition in India.
(d) All are correct
(e) None of these

89. (a) MTNL has started leasing out it building in New Delhi.
(b) The lump sum compensation to be given to employees of BSNL and MTNL have been fixed at 35 days of salary for each year in service
(c) The VRS is approved by the Central government in October last year.
(d) All are correct
(e) None of these

Directions (90-95): In the following questions, a sentence is given with four bold words. One of these words may be contextually incorrect. Choose the incorrect word as your answer. If all of the given words are correct then choose option (e).

90. Happy the girl was, for her mother was dead, her father had married another woman, a widow with two daughters, and her stepmother didn't like her one little bit.
(a) happy (b) married (c) widow
(d) like (e) None of these.

91. One day, while the Bodhisattva was walking through the forest with his discipline Ajita, he saw a hungry tigress about to eat her own cubs.
(a) walking (b) discipline (c) hungry
(d) cubs (e) None of these.

92. The merchant had good breakfast and after tidying himself up, went downstairs to thank his cruel host.
(a) merchant (b) tidying (c) downstairs
(d) cruel (e) None of these.

93. Kids made a beautiful agreement by putting coloured rocks on the sides of the table.
(a) beautiful (b) agreement (c) plural
(d) sides (e) None of these.

94. Employees of the state-run BPCL, who participated in a nation-wide strike on 8 January, have rejoiced that the company cut four days' salary.
(a) Employees (b) participated (c) strike
(d) rejoiced (e) None of these.

95. Eight-year-old Gabi Mann sets a bead storage container on the dining room table, and shuts the lid open.
(a) bead (b) container (c) table
(d) shuts (e) None of these.

Directions (96-100): Read the following passage, few blanks have been provided which have to be filled according to the options given below in such a manner that they provide grammatical and contextual meaning to the sentences.

Once there was a very good little girl who lived with her parents in a small bamboo house. One day she was _(96) over a basket of paddy drying in the sun in front of her house when a large golden crow flew up and ate every grain.
"Oh dear, oh dear," cried the little girl said. "My parents and I will go hungry now with no rice to eat."
The golden crow felt sorry and and gave her directions to come to his nest to get payment for the paddy. The next day the little girl walked into the forest as instructed and saw a very tall tree with a crow's nest high in the branches. The crow was waiting for her and said he would let down a ladder for her.
"Do you want a ladder of gold or silver or wood?" he asked.
"A wooden one, thank you," the little girl said for she has never seen ladders of gold or silver before. But the crow let down a ladder of gold.
When she _____(97)_____ the nest, the crow offered her a drink of sweet juice.
"Would you like it from a gold cup, a silver cup or a clay cup?" he asked.
"A clay cup, thank you," the little girl said for she has never seen cups of gold or silver. But the crow gave her drink in a cup of gold.
The crow then _____(98)_____ her plate of rice cakes.

"Would you like it on a gold plate, a silver plate or a clay plate?" he asked.
"A clay plate, thank you," the little girl said for she has never seen plates of gold or silver. But the crow gave her cakes on a plate of gold.
Finally, the crow showed her three bags, big, medium and small. The crow_____(99)_____ that she take the big bag and she came home with it. When she and her parents opened it, it was full of rubies and they became very rich.
"This is your payment," he said. "Please choose a bag. "Meanwhile, their next-door neighbours heard the story and their daughter was made to sit in front of the house to watch over a handful of _____(100)_____ paddy. The golden crow ate up the paddy and the girl demanded payment.

96. (a) running (b) falling (c) waiting (d) watching (e) jogging

97. (a) below (b) dried (c) reached (d) dived (e) cried

98. (a) talked (b) offered (c) declared (d) damaged (e) called

99. (a) insisted (b) refused (c) burned (d) surround (e) trim

100. (a) speedy (b) deleted (c) frying (d) drying (e) dusting

Solutions

REASONING ABILITY

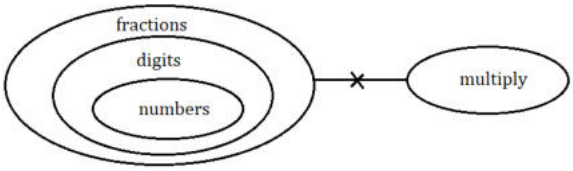
Solutions (1-5):

Months	Persons
January	R
March	Q
April	T
May	U
July	W
August	S
September	P
October	V

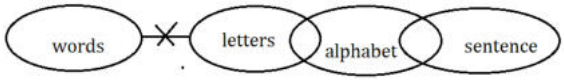
1. (d); 2. (e) 3. (c);

4. (d); 5. (c);

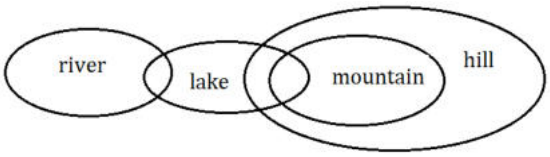
6. (b);



7. (e)

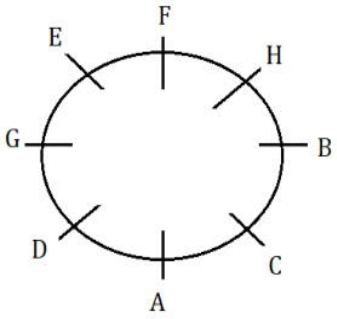


8. (a);



9. (d);

Solutions (10-14):



10. (a); 11. (b); 12. (b);

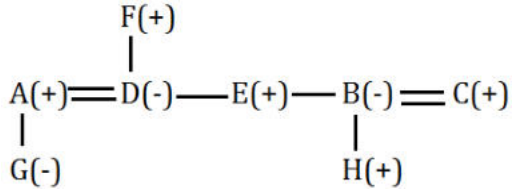
13. (c); 14. (b);

15. (a); 16. (e) 17. (c);

18. (c); 19. (a);

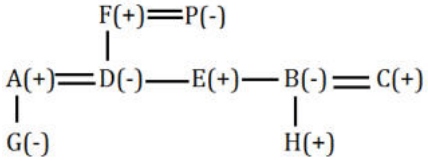
20. (b); Two

Solutions (21-23):



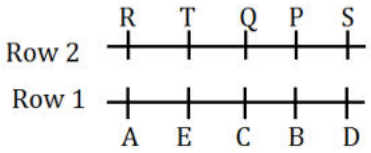
21. (c); 22. (d);

23. (c);



24. (c); One

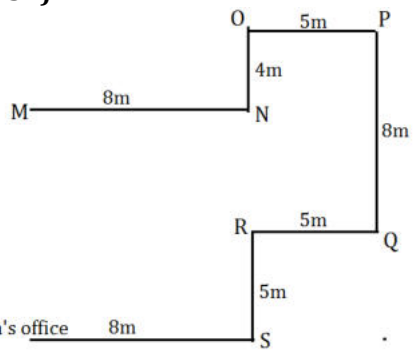
Solutions (25-29):



25. (d); **26. (b);** **27. (b);**

28. (e) **29. (a);**

Solutions (30-32):



30. (b); **31. (b);** **32. (d);**

33. (a); **I:** B>W (True) **II:** E≥B (False)

34. (a); **I:** N≤H (True) **II:** B>J (False)

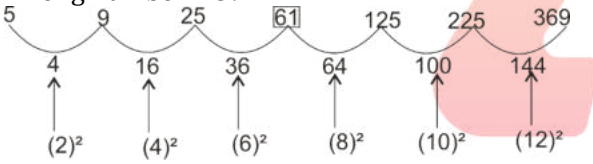
35. (e) **I:** L>B (True) **II:** N<U (True)

Quantitative Aptitude

36. (b); Wrong number = 6

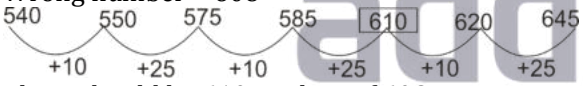
There should be 4 in place of 6.

37. (d); Wrong number = 59



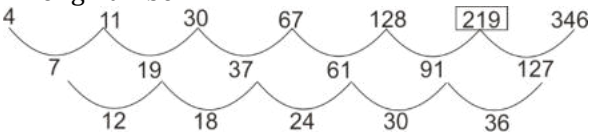
There should be 61 in place of 59.

38. (a); Wrong number = 608



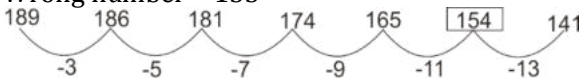
There should be 610 in place of 608.

39. (c); Wrong number = 221



There should be 219 in place of 221

40. (d); Wrong number = 155



There should be 154 in place of 155.

41. (d); Sum of 10 numbers = 35 × 10 = 350

Average of remaining 2 number

$= \frac{\{350-(200+66)\}}{2} = 42$

42. (e) Speed of current = $\frac{4}{2}$ = 2 kmph

Speed of boat in still water = 14 kmph

Required time taken = $\frac{48}{14+2}$ = 3 hours

43. (a); SP of book = $600 \times \frac{4}{3} = 800\ Rs.$

MRP of the book = $\frac{100}{80} \times 800 = 1000\ Rs.$

Discount given on the book

= 1000 – 800 = 200 Rs.

44. (c); Let Present age of A and B be 4x years and 3x years respectively.

ATQ, $4x - 3x = 4$

x = 4

Present age of B = 4 × 3 = 12 years

Present age of C = 12 – 4 = 8 years.

10 years hence Age of C = $8 + 10 = 18\ years.$

45. (c); Let length of the train X be 2a meter.

ATQ

$15 = \frac{2a+a}{15+72\times\frac{5}{18}} \Rightarrow 15 = \frac{3a}{35} \Rightarrow$ a = 175 m

So, length of train X = $2a = 350\ m$

46. (d); Total toys sold on Monday = 128 + 120 = 248

Total toys sold on Wednesday = 130 + 125 = 255

Required difference = 255 – 248 = 7

47. (d); Total Plastic toys sold on Tuesday and Friday

= 134 + 140 = 274

Total Wooden toys sold on Wednesday and Friday

= 130 + 130 = 260

Required percent = $\frac{274-260}{260} \times 100$

$= \frac{14}{260} \times 100 = 5\frac{5}{13}\%$

48. (b); Required average = $\frac{134+125+140}{3} = \frac{399}{3} = 133$

49. (c); Total toys sold on Thursday = 146 + 124 = 270

total toys sold on Friday = 140 + 130 = 270

Required ratio = $\frac{270-270}{270} \times 100 = 0\%$

50. (e) Number of Wooden toys purchased by female on Wednesday = $\frac{7}{10} \times 130 = 91$

51. (a); $\frac{45}{100} \times 1600 + ?^2 = 1044$
$?^2 = 324$
$? = 18$

52. (c); $\frac{22}{100} \times 1500 + \frac{22.5}{100} \times 1000 = ?$
$? = 330+225 \Rightarrow ? = 555$

53. (a); $? + 512 = 676 - 43$
$? = 633 - 512 \Rightarrow ? = 121$

54. (d); $? + 820 = \frac{25}{100} \times 6400$
$? = 1600 - 820 \Rightarrow ? = 780$

55. (c); $? + \frac{11}{2} - \frac{10}{3} = 3$
$? = 3 - \frac{11}{2} + \frac{10}{3} \Rightarrow ? = \frac{5}{6}$

56. (a); $\sqrt{400 + 84} + 18 = ? \Rightarrow ? = 40$

57. (c); $2^? = (2)^3 \times (2^2)^2 \div 2^3$
$2^? = 2^4 \Rightarrow ? = 4$

58. (b); $? = \frac{12}{13} \times 143 \div 6 - 12 \Rightarrow ? = 10$

59. (e) $? = 111+11+1111+11111 \Rightarrow ? = 12344$

60. (e) 75% of 300 - 175=70-?
$225 - 175 = 70 - ?$
$? = 20$

61. (b); $\left(\sqrt{64} + 3\right)^3 = 750 + ?$
$\Rightarrow ? = (11)^3 - 750 = 581$

62. (a); $\frac{\sqrt{36} \times \sqrt{64}}{4} = ? \Rightarrow ? = \frac{6 \times 8}{4} = 12$

63. (e) $\frac{9800}{45+20\times2-50} = ? \Rightarrow ? = \frac{9800}{35} = 280$

64. (a); $\frac{220 \div 20 \times 135 \div 15}{3} = ? \Rightarrow ? = \frac{11 \times 9}{3} = 33$

65. (c); $\frac{4 \times ?}{100} \times 210 + 225 = 351$
$\Rightarrow \frac{?}{25} \times 210 = 126 \Rightarrow ? = 15$

66. (c); Let the length and breadth of rectangle be (x+3) cm and x cm. respectively.
ATQ,
$(x+3) \times x = 180$
$x^2+3x-180 = 0$ ----- (i)
After solving, we get
x= 12
So, side of square = 12 cm
Perimeter of square = 12×4 = 48 cm

67. (a); Let amount invested by A & B be Rs.3x & Rs.2x respectively.
Profit sharing ratio of A to B
$= (3x \times 6) : (2x \times 6) = 3:2$
Profit share of B = $\frac{2}{5} \times 5000 = 2000\ Rs.$

68. (a); Total SI = $P \times 12 \times \frac{3}{100} = \frac{36P}{100}\ Rs.$
Effective rate of interest for CI at 15% p.a. compounding annually for 2 years
$= 15+15 + \frac{(15 \times 15)}{100} = 32.25\%$
Total CI = $P \times \frac{32.25}{100} = \frac{32.25P}{100}\ Rs.$
ATQ, $\frac{36P}{100} - \frac{32.25P}{100} = 375$
P = 10000 Rs.

69. (b); Let the total work be 30 units (LCM of 6 and 10)
Efficiency of Shivam=5 units/hr
Efficiency of Deepak=3 units/hr
twice of the work= 60 units
Required time=$\frac{60}{5+3} = 7\frac{1}{2}$ hr

70. (a); Ratio of water to that of juice in the initial mixture=6:5
50% of the mixture=44 liter
ATQ,
$\frac{48 - 44 \times \frac{6}{11}}{40 - 44 \times \frac{5}{11} + a} = \frac{4}{5}$
$a = 10$ liter

English Language

71. (d); To validate the answer, refer to the first paragraph, which mentions, "Her parents explained to her, everyday and with great patience, that these things were not monsters. Marina understood her parents, but she could not stop feeling an awful fear whenever it was dark." Referring to the quoted text, we can infer that the statement given in option (d) is most suitable choice in context of the given question. Hence, option (d) is the correct answer choice.

72. (c); To validate the answer, refer to the first paragraph, which mentions, ""A great many times, Marina," answered her Aunt, "I remember when I was small and I was terribly afraid of the dark. I couldn't stay in the dark for even a moment"." Referring to the quoted text, we can infer that the statement given in option (c) is appropriate in context of the given question. Hence, option (c) is the most suitable answer choice.

73. (c); To validate the answer, refer to the second paragraph, which mentions, "Since blind children can't see, their hands are their eyes. All you have to do to conquer your fear is what they do. Shut the eyes of your face and open the eyes of your hands." As per the information available in the given passage, we can infer that option (c) is the most suitable answer choice.

74. (b); To validate the answer, refer to the second paragraph, which mentions, "It was some blind children who taught me how to be brave. They can't see, so if they had never discovered the secret of how not to be afraid of the dark, they would have been forever frightened"." Referring to the quoted text, we can infer that the statement given in option (b) is most suitable in context of the given question. Hence, option (b) is the most suitable answer choice.

75. (c); To validate the answer, refer to the last paragraph, which mentions, "She knew she would need to be brave to close her eyes and go and touch whatever it was that was frightening her; but she was willing to try because she was already too old for this." Referring to the quoted text, we can infer that the statement given in option (c) is correct in context of the information available in the passage.

76. (d); Among the given phrases, the most suitable phrase to fill in the blank will be 'opened the eyes of her hands'. The hint can be gathered from the previous statements, where Aunt Valerie mentions that blind children use the eyes of hands. No other phrase could make the statement both grammatically correct and contextually meaningful. Hence, option (d) is the most suitable answer choice.

77. (e) Among the given words, 'reflection' can replace 'shadow' to give a similar meaning to the statement, as given in the passage. Hence, option (e) is the most suitable answer choice.

78. (b); Put out means "to stop something from burning or shining". Here, it has been used in context of the lights, where 'switch off' can aptly replace to infer the similar meaning. Also, 'extinguish' cannot fit in the given blank as it will make the statement grammatically incorrect. Hence, option (b) is the most suitable answer choice.
Extinguish- to make a fire stop burning or a light stop shining
Blow out- if a flame, etc. blows out, it is put out by the wind, etc

79. (c); Among the given words, 'grasp' can replace 'grab' to give a similar meaning. Although other words are synonymous with 'grab' but they would not give the similar meaning to the statement. Hence, option (c) is the most suitable answer choice.

80. (d); The most suitable word for the given blank is 'looking' which fits the blank grammatically and contextually. All the other words are either grammatically incorrect or contextually meaningless. Hence, option (d) is the correct answer choice.

81. (c); The most suitable word for the given blank is 'dropping' which fits the blank grammatically and contextually. All the other words are either grammatically incorrect or contextually meaningless. Hence, option (c) is the correct answer choice.

82. (c); The most suitable word for the given blank is 'collect' which fits the blank grammatically and contextually. All the other words are either grammatically incorrect or contextually meaningless. Hence, option (c) is the correct answer choice.

83. (d); The most suitable word for the given blank is 'preparing' which fits the blank grammatically and contextually. All the other words are either grammatically incorrect or contextually meaningless. Hence, option (d) is the correct answer choice.

84. (b); The most suitable word for the given blank is 'blown' which fits the blank grammatically and contextually. All the other words are either grammatically incorrect or contextually meaningless. Hence, option (b) is the correct answer choice.

85. (a); In statement (b)Was takes V3 so change 'tore' into 'torn'.
Also, in statement (c) change 'Over' to 'of'.
Here only option (a) is grammatically correct. So correct answer will be option (a).

86. (d); All sentences are grammatically correct. So correct answer will be option (d).

87. (c); In statement (a) change 'has' to 'have'.
In statement (b) change 'officers' to 'officer'

88. (a); In statement (a) 'was' is correct because 'percentage of' takes singular verb
In statement (b) information has no plural form, so remove 's' from 'informations'
In statement (c) change 'over' to 'of'
Here only option (a) is grammatically correct. So correct answer will be option (a).

89. (e) In statement (a) change 'it' to 'its'
In statement (b) change 'have' to 'has' as compensation is singular in form.
In statement (c) change 'is' to 'was' as sentence is in past form.
All sentences are grammatically incorrect. So correct option will be (e).

90. (a); In the given sentence 'happy' is contextually incorrect because the given sentence is talking about the miseries of the girl. So, instead of 'happy' it should be 'unhappy'. So, the correct answer choice is option (a).

91. (b); In the given sentence, 'discipline' is contextually incorrect as it fails to provide meaningful sense to the sentence. Instead it should be 'disciple' which means a follower or pupil of a teacher. Hence, the correct answer choice would be option (b).

92. (d); Usage of 'cruel' is incorrect here because the host had offered him a good breakfast, from this it can be inferred the host was not cruel. So, instead of 'cruel' it should be 'generous'. Hence, the correct answer choice would be option (d).

93. (b); In the given sentence 'agreement' is incorrect instead it should be 'arrangement' because the sentence is talking about the kids who placed the rocks on the corner of the tables. Hence, the correct answer choice would be option (b).

94. (d); Since the company have cut the salaries of the employees who participated in strike, the employees can not be happy about this. So, instead of 'rejoiced' it should be 'alleged'. Hence, the correct answer choice would be option (d)

95. (d); Taking hint from the last part of the sentence it can be clearly seen that the usage of 'shuts' is incorrect instead it should be 'clicks'. Hence, the correct answer choice would be option (d).

96. (d); From the given options, only option (d) fits to make a contextually meaningful sentence, remaining options render no meaning to the paragraph. The given sentence talks about the little girl keep a watch at the basket of paddy drying in front of the sun, rest of the options do not fit in the given context other than the mentioned in the answer.
Watching: look at or observe attentively over a period of time.

97. (c); From the given options, only option (c) fits to make a contextually meaningful sentence, remaining options render no meaning to the paragraph.
Dived: plunge head first into water with one's arms raised over one's head.
Reached: arrive at; get as far as.

98. (b); From the given options, only option (b) fits to make a contextually meaningful sentence, remaining options render no meaning to the paragraph.
Offered: present (something) for (someone) to accept or reject as desired.
Demanded: insist on having

99. (a); From the given options, only option (a) fits to make a contextually meaningful sentence, remaining options render no meaning to the paragraph. In the given sentence the crow as a mark of his guilt insists the girl to take the bigger bag which she later finds out to contain gemstones.
Insisted: demand something forcefully, not accepting refusal.
Trim: make (something) neat or of the required size or form by cutting away irregular or unwanted parts.
Surround: all round a particular place or thing.

100. (d); From the given options, only option (d) fits to make a contextually meaningful sentence, remaining options render no meaning to the paragraph. The sentence talks about the neighbours hearing the story of the girl and make their daughter sit outside to watch over drying paddy, hoping they might also find the crow who will make them rich. All the other options present do not make any contextual sense.
Drying: a mass transfer process consisting of the removal of water or another solvent by evaporation from a solid, semi-solid or liquid.

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50+ Bank PO|Clerk
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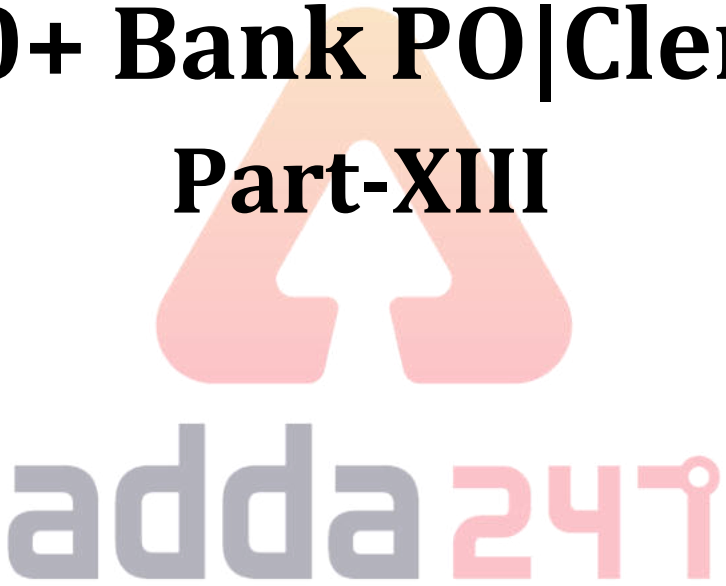


Banking Awareness MCQ

1. A _____ is a bank certificate issued in more than one country for shares in a foreign company.
(a) Gross national product (GNP)
(b) Global Depositary Receipt (GDR)
(c) Gross domestic product (GDP)
(d) Society for Worldwide Interbank Financial Telecommunication (SWIFT)
(e) Eurobond

2. _____ is a specific division of banking related to the creation of capital for other companies, governments and other entities.
(a) Narrow Banking
(b) Current Banking
(c) Universal Banking
(d) Retail Banking
(e) Investment banking

3. The Varishtha Pension Bima Yojana 2017, a pension scheme for senior citizens, was approved by the Union Cabinet. It provides an assured pension based on a guaranteed rate of return of 8 per cent for-?
(a) 25 years (b) 20 years (c) 15 years
(d) 10 years (e) 5 years

4. Loan disbursed under MUDRA yojna is insured by-
(a) SEBI (b) Banking Lokpal
(c) CGTMSE (d) RBI (e) DICGC

5. Multilateral Investment Guarantee Agency (MIGA) is an international financial institution which offers political risk insurance and credit enhancement guarantees. Where is the head office of MIGA?
(a) Vienna (b) Washington DC
(c) Paris (d) London (e) New York

6. CRISIL pioneered the first corporate sector rating in 1988. It is what type of a company?
(a) Lender
(b) Geographical
(c) Analytical
(d) Insurance
(e) None of the given options is true

7. How many banks were Nationalised in 1969?
(a) 10 (b) 6 (c) 14
(d) 12 (e) 8

8. _____ is an accounting term that refers to the process of allocating the cost of an intangible asset or reduction in amount of loan over a period of time.
(a) Liability
(b) Inflation
(c) Depreciation
(d) NPA
(e) Amortization

9. National Institute of Securities Markets (NISM) is a public trust, established by-
(a) NABARD (b) SEBI (c) RBI
(d) SIDBI (e) IRDAI

10. The government has notified raising the threshold limit of PF withdrawal for deduction of tax (TDS) from existing Rs 30,000 to-
(a) Rs 90,000 (b) Rs 70,000 (c) Rs 40,000
(d) Rs 50,000 (e) Rs 60,000

11. Credit card facility has not given by which institution?
(a) Payment Banks
(b) Nationalized Banks
(c) Public Sector Banks
(d) Regional Rural Banks
(e) Foreign Banks

12. An ELSS is a diversified equity mutual fund which has a majority of the corpus invested in equities. What is the meaning of "L" in ELSS?
(a) Least (b) Limited (c) Lose
(d) Level (e) Linked

13. CAGR is the mean annual growth rate of an investment over a specified period of time longer than one year. CAGR stands for-
(a) Compound Annual General Rate
(b) Compound Annual Growth Rate
(c) Compound Annual Growth Ratio
(d) Cancel Annual Growth Rate
(e) Compound Assembly Growth Rate

14. Name the organization, which regulates microfinance given by NBFC?
(a) RBI (b) SEBI (c) NABARD
(d) SIDBI (e) IRDAI

15. _____ is a secure messaging standard developed to serve as a platform for intra-bank and inter-bank applications.
(a) Structured Financial Messaging System (SFMS)
(b) Centralized Funds Management Systems (CFMS)
(c) Society for Worldwide Interbank Financial Telecommunication (SWIFT)
(d) Institute for Development & Research in Banking Technology (IDRBT)
(e) Electronic Funds Transfer (EFT)

16. A _____ is the risk of default on a debt that may arise from a borrower failing to make required payments.
(a) current risk
(b) export risk
(c) operational risk
(d) market risk
(e) credit risk

17. LAF is a monetary policy tool which allows banks to borrow money through repurchase agreements or repos. What is the meaning of "L" in LAF?
(a) Lose (b) Lesson (c) Lease
(d) Labour (e) Liquidity

18. The _____ is where overnight (one day) loans can be availed by banks to meet liquidity.
(a) Call Money
(b) Notice Money
(c) Short Money
(d) Half Money
(e) Soft Money

19. An _____ is used by startups to bypass the rigorous and regulated capital-raising process required by venture capitalists or banks.
(a) Ending Coin Offering
(b) Initial Coin Offering
(c) Banking Coin Offering
(d) External Coin Offering
(e) Economy Coin Offering

20. _____ of a bank is the ratio of deposits in current and saving accounts to total deposits.
(a) RASA ratio (b) FARA ratio (c) SADA ratio
(d) NASA ratio (e) CASA ratio

21. _____ is a trade and economic policy which advocates replacing foreign imports with domestic production.
(a) Import substitution industrialization
(b) Reduction in import
(c) Decrease in export
(d) Boost of Economy
(e) Increase in trade

22. To make the payments process easier the Government of India has launched the _____ payments transfer mechanism for cashless electronics payments.
(a) UPI
(b) Bharat QR Code
(c) IMPS
(d) Quick Pay
(e) Bhim app

23. Which among the following is NOT a function of RBI?
(a) To work as monetary authority and implement its Monetary Policy
(b) To serve as issuer of bank notes
(c) Working to foster global monetary cooperation, secure financial stability for member countries
(d) Serve as banker to central and state governments
(e) None of the given options is true

24. Slowdown in the rate of increase of price of goods and service in national GDP over a time called?
(a) Deflation (b) Reflection (c) Stagflation
(d) Disinflation (e) Recession

25. _____ is a market form wherein a market or industry is dominated by a small number of sellers.
(a) Capitalization (b) Vendor (c) Group
(d) Cartel (e) oligopoly

26. _____ is a written commitment by a bank issued after a request by an importer (foreign buyer) that payment will be made to the beneficiary (exporter) provided that the terms and conditions.
(a) Buyers Products
(b) shares and debentures
(c) Letter of Credit
(d) Working Capital
(e) None of the given options is true

27. Banking Correspondents (BCs) are individuals/entities engaged by a bank in India (commercial banks, Regional Rural Banks (RRBs) and Local Area Banks (LABs)) for providing banking services in unbanked/under-banked geographical territories. BCs are paid by-
(a) Third Party
(b) Bank which appoints BCs
(c) RBI
(d) NABARD
(e) RRBs

28. What is maximum limit for saving accounts in India Post Payments Bank (IPPB)?
(a) Rs 5 lakh (b) Rs 4 lakh (c) Rs 3 lakh
(d) Rs 2 lakh (e) Rs 1 lakh

29. The Kisan Credit Card (KCC) scheme is a credit scheme introduced in August 1998 by Indian banks. This model scheme was prepared by-
(a) NABARD (b) RBI (c) SEBI
(d) FICCI (e) SIDBI

30. The LTV ratio is a lending risk assessment ratio that financial institutions and others lenders examine before approving a mortgage. What is the meaning of "V" in LTV?
(a) Voucher (b) Vacuum (c) Vendor
(d) Vehicles (e) Value

31. The City Union Bank Limited is an Indian bank. Where is the headquarters of City Union Bank?
(a) Uttar Pradesh (b) West Bengal (c) Kerala
(d) Tamil Nadu (e) Maharashtra

32. The SEAC's function on the principle of collective responsibility. What is the meaning of "A" in SEAC?
(a) Agriculture (b) Appraisal (c) Appeared
(d) Authority (e) Approval

33. Bandhan Bank Limited is an Indian banking and financial services company headquartered in Kolkata, West Bengal. Bandhan, which started as a _____ company in 2001.
(a) micro-finance
(b) small-finance
(c) medium-finance
(d) industry-finance
(e) rural-finance

34. SWIFT provides a network that enables financial institutions worldwide to send and receive information about financial transactions in a secure, standardized and reliable environment. What is the meaning of "S" in SWIFT?
(a) Society (b) Service (c) System
(d) Solution (e) Sending

35. In Notice Money Market,the tenor of the transactions is from _____
(a) 2-7 days (b) 2-14 days (c) 2-21 days
(d) 2-28 days (e) 2-90 days

36. The _____ risk is the risk that an investment's value will change due to a change in the absolute level of interest rates, in the spread between two rates, in the shape of the yield curve.
(a) current risk
(b) interest risk
(c) operational risk
(d) market risk
(e) credit risk

37. The RBI has allowed ARCs to hold more than _____ post conversion of debt into equity in companies undergoing restructuring recently.
(a) 15% (b) 20% (c) 17%
(d) 26% (e) 10%

38. BCSBI was registered as a society under the _____ in February 2006.
(a) Companies Act, 1956
(b) Societies Registration Act, 1860
(c) Banking Regulation Act, 1949
(d) Reserve Bank of India Act, 1934
(e) None of these

39. NSDP links are intended to provide quick access to a single comprehensive source of economic and financial data consistent with the data categories and components described in the subscriber's metadata. NSDP stands for-
(a) National Summary District Page
(b) National Summary Development Page
(c) National Summary Department Page
(d) National Summary Division Page
(e) National Summary Data Page

40. Which of the following has launched the India's first bitcoin trading app?
(a) Venus Exchange
(b) Bitcoin Exchange
(c) Uranus Exchange
(d) Pluto Exchange
(e) None of theses

41. What is the present Annual Rate of Interest on Kisan Vikas Patra (KVP) as on 01.07.2019.?
(a) 8.4% (b) 7.8% (c) 7.5%
(d) 8.2% (e) 7.6%

42. The arrangement under which banks sell insurance products acting as the agents of the respective companies is called the.....?
(a) Insurance joint venture
(b) Bancassurance Model
(c) Hybrid Insurance Model
(d) Insurance Broking
(e) None of these

43. Who among the following regulates the Indian Corporate Debt Market?
(a) RBI (b) NABARD (c) SIDBI
(d) SEBI (e) PFRDA

44. Which of the following is the purpose of introducing "Know Your Customer" norms by the banks?
(a) Identifying people who do not pay Income Tax
(b) To bring more and more people under the banking net
(c) To ensure that the money deposited in banks has come from genuine sources
(d) All of the Above
(e) None of the given options is true

45. What is the minimum initial deposit required for opening a Basic Savings Bank Deposit Account (BSBDA)?
(a) Rs 500 (b) Rs 1000 (c) Rs 100
(d) No initial deposit (e) Rs 200

46. What is the minimum amount to be remitted through RTGS-
(a) Rs.2 lakh (b) Rs. 50, 000 (c) Rs.1 lakh
(d) Rs.5 lakh (e) Rs.10 lakh

47. RNBC stands for-
(a) Residuary Non-Banking Companies
(b) Reserve Non Banking Companies
(c) Reserve New Banking Companies
(d) Re-curring New Banking Companies
(e) None of the given options is true

48. A debt which is irrecoverable and is therefore written off as loss in the accounts of an institution or bank is known as _____
(a) external debt
(b) good debt
(c) bad debt
(d) internal debt
(e) None of the given options is true

49. Government of India created the Rural Infrastructure Development Fund (RIDF) in NABARD in 1995-96, with an initial corpus of :-
(a) Rs.3,000 crore
(b) Rs. 2,000 crore
(c) Rs.4,000 crore
(d) Rs.6,000 crore
(e) Rs.5,000 crore

50. _____ is a deposit account provided by a bank or other financial institutions for individuals to save money and earn the modest interest for that money held in the account.
(a) Fixed Deposit Account
(b) Savings Bank Account
(c) Recurring Account
(d) Current Account
(e) None of the given options is true

51. The New Development Bank (NDB) aims to mobilize resources for development projects in BRICS, emerging economies and developing countries. Where is the headquartered of NDB?
(a) Durban, South Africa
(b) Brasilia, Brazil
(c) Moscow, Russia
(d) Shanghai, China
(e) New Delhi, India

52. With an initial funding of $912.7million, International Development Association (IDA) was launched on-
(a) 24th September 1960
(b) 17th December 1920
(c) 22nd November 1959
(d) 23rd May 1919
(e) 15th October 1945

53. NIBM was established in _____ by the Reserve Bank of India, in consultation with the Government of India, as an autonomous apex institution for research, training, education and consultancy in bank management.
(a) 1982 (b) 1949 (c) 1921
(d) 1934 (e) 1969

54. NIBM is part of the grand vision of giving a new direction to the banking industry in India and making the industry a more cost-effective instrument for national development. NIBM stands for-
(a) Non-Organization Institute of Bank Management
(b) National Institute of Bureau Management
(c) National Investment of Bank Management
(d) National Institute of Bank Management
(e) None of the above

55. NIBM, an autonomous academic institution, is governed by a Board, its highest policy-making body. Where is the headquartered of NIBM?
(a) Nashik, Maharashtra
(b) Pune, Maharashtra
(c) Mumbai, Maharashtra
(d) Kolhapur, Maharashtra
(e) Nagpur, Maharashtra

56. _____ is an electronic fund transfer system that operates on a Deferred Net Settlement (DNS) basis which settles transactions in batches.
(a) NEFT (b) RTGS (c) NPCI
(d) BBPS (e) IMPS

57. The Central Office of the Reserve Bank was initially established in Calcutta (now Kolkata) but was permanently moved to Mumbai in-
(a) 1949 (b) 1937 (c) 1943
(d) 1945 (e) 1934

58. The Reserve Bank of India (RBI) is vested with the responsibility of conducting monetary policy. This responsibility is explicitly mandated under which act?
(a) Companies Act, 1956
(b) Negotiable Instruments Act, 1881
(c) Reserve Bank of India Act, 1934
(d) Banking Regulation Act, 1949
(e) None of the given options is true

59. A facility under which scheduled commercial banks can borrow additional amount of overnight money from the Reserve Bank by dipping into their Statutory Liquidity Ratio (SLR). It is called?
(a) Repo Rate
(b) Reverse Repo Rate
(c) Bank Rate
(d) Marginal Standing Facility (MSF)
(e) Liquidity Adjustment Facility (LAF)

60. National Housing Bank (NHB) was set up on _____ under the National Housing Bank Act, 1987.
(a) 01st July 1956 (b) 02nd October, 1976
(c) 01st January 1934 (d) 21st May 1956
(e) 09th July 1988

61. _____ an asset, including a leased asset, becomes non- performing when it ceases to generate income for the bank.
(a) NPA (b) KCC (c) NPV
(d) GDP (e) GNP

62. NPA stands for-
(a) National -performing Assets
(b) New -performing Assets
(c) Non -production Assets
(d) Non -performing Assembly
(e) Non -performing Assets

63. MUDRA is a financial institution has been set up by Government of India for development and refinancing micro units' enterprises. What is the meaning of "A" in MUDRA?
(a) Agency (b) Association (c) Assembly
(d) Agent (e) Alert

64. MUDRA stands for-
(a) Micro Units Development & Refinance Agent
(b) Medium Units Development & Refinance Association
(c) Micro Units Department & Refinance Agency
(d) Micro Units Development & Refinance Agency
(e) Micro Unique Development & Refinance Assembly

65. India was one of the first in Asia to recognize the effectiveness of the EPZ model in promoting exports. EPZ stands for-
(a) Export Point Zone
(b) External Processing Zone
(c) Export Production Zone
(d) Export Processing Zone
(e) Export Processing Zonal

66. Asia's first EPZ was set up in-
(a) Kandla, Gujarat
(b) Indore, Madhya Pradesh
(c) Kolhapur, Maharashtra
(d) Kochin, Kerala
(e) Haridwar, Uttarakhand

67. NPA is a loan or an advance where interest and/or installment of principal remain overdue for a period of more than _____ days in respect of a term loan.
(a) 100 days (b) 30 days (c) 90 days
(d) 60 days (e) 120 days

68. NPA is a loan or an advance where?
(a) the instalment of principal or interest there on remains overdue for one crop season for long duration crops.
(b) the account remains 'out of order' in respect of an Overdraft/Cash Credit (OD/CC).
(c) the instalment of principal or interest there on remains overdue for two crop seasons for short duration crops.
(d) All of the above
(e) None of the above

69. The purpose of MUDRA is to provide funding to the non-corporate small business sector through various Last Mile Financial Institutions like-
(a) Banks
(b) NBFCs
(c) MFIs
(d) All of the above
(e) None of the above

70. MUDRA Bank, a Non-Banking Finance Company as MUDRA Ltd has been set up as a subsidiary of.....?
(a) SIDBI (b) IDBI (c) RBI
(d) NABARD (e) SBI

71. In which among the following year Asia's first Export Processing Zone (EPZ) was set up?
(a) 1959 (b) 1971 (c) 1965
(d) 1956 (e) 1975

72. What is the meaning of "E" in SEZs?
(a) Essential (b) Economic (c) Electronic
(d) Effective (e) None of the above

73. Banks are required to classify NPA further into the _____ categories based on the period for which the asset has remained non-performing and the realisability of the dues.
(a) One (b) Three (c) Two
(d) Four (e) Six

74. Which among the following are not the categories of NPA?
(a) Sub-standard Assets (b) Profit Assets
(c) Doubtful Assets (d) Loss Assets
(e) None of the above

75. PMMY were launched on 08 April 2015 by the Hon'ble Prime Minister Narendra Modi. What is the full form of PMMY?
(a) Pradhan Manager MUDRA Yojana
(b) Pradhan Mantri MUDRA Yatra
(c) Pradhan Mantri MUDRA Yojana
(d) Pramukh Mantri MUDRA Yojana
(e) None of the above

76. MUDRA gives loan in how many categories?
(a) Two (b) One (c) Three
(d) Four (e) Six

77. Which among the following is not a loan category of MUDRA bank?
(a) Shishu (b) Arun (c) Kishor
(d) Tarun (e) None of the above

78. SEZs Policy was announced in _____ with the objective of making the SEZs an engine for economic growth, supported by quality infrastructure and an attractive fiscal package both at the Central and State level with a single window clearance.
(a) December 1999
(b) October 2010
(c) January 2005
(d) July 1991
(e) April 2000

79. The main objectives of the SEZ act are-
(a) Generation of additional economic activity
(b) Promotion of exports of goods and services
(c) Promotion of investment from domestic and foreign sources
(d) Creation of employment opportunities
(e) All of the above

80. With effect from 31 March 2005, a _____ would be one, which has remained NPA for a period less than or equal to 12 months.
(a) Sub-standard Assets
(b) Profit Assets
(c) Doubtful Assets
(d) Loss Assets
(e) None of the above

81. With effect from March 31, 2005, an asset would be classified as _____ if it has remained in the sub-standard category for a period of 12 months.
(a) Sub-standard Assets
(b) Profit Assets
(c) Doubtful Assets
(d) Loss Assets
(e) None of the above

82. What is the financial limit Under MUDRA's Shishu scheme?
(a) Rs. 5, 00,000 (b) Rs. 50,000 (c) Rs. 1, 00,000
(d) Rs. 10,000 (e) Rs. 1, 50,000

83. What is the financial limit Under MUDRA's Kishor scheme?
(a) Rs. 50,000 to Rs. 10 lakh
(b) Rs. 50,000 to Rs. 3 lakh
(c) Rs. 50,000 to Rs. 1 lakh
(d) Rs. 50,000 to Rs. 2 lakh
(e) Rs. 50,000 to Rs. 5 lakh

84. Which among the following Incentives and facilities offered to the SEZs is not correct-
(a) Duty free import/domestic procurement of goods for development, operation and maintenance of SEZ units.
(b) Exemption from State sales tax and other levies as extended by the respective State Governments.
(c) Exemption from minimum alternate tax under section 115JB of the Income Tax Act.
(d) 100% Income Tax exemption on export income for SEZ units under Section 10AA of the Income Tax Act for 10 years, 50% for next 5 years thereafter and 50% of the ploughed back export profit for next 5 years.
(e) Exemption from Central Sales Tax.

85. _____ is a specifically delineated duty-free enclave and shall be deemed to be foreign territory for the purposes of trade operations and duties and tariffs.
(a) SEZs (b) FDI (c) FIPB
(d) CDR (e) CSR

86. Which committee has recommended the setting up of Special Tribunals to reduce the time required for settling cases and accepting the recommendations, DRTs were established?
(a) Kelkar committee
(b) Justice Reddy committee
(c) Rangarajan Committee
(d) Sivaraman Committee
(e) Narasimham Committee

87. DRT has been constituted under Section 3 of the Recovery of Debts Due to Banks and Financial Institutions Act, 1993. DRT stands for-
(a) Debt Recovery Tribunals
(b) Demand Recovery Tribunals
(c) Deposit Recovery Tribunals
(d) Debt Refinance Tribunals
(e) Debt Recovery Treaty

88. What is the financial limit Under MUDRA's Tarun scheme?
(a) Rs. 40 lakh to Rs. 50 lakh
(b) Rs. 30 lakh to Rs. 40 lakh
(c) Rs. 20 lakh to Rs. 30 lakh
(d) Rs. 10 lakh to Rs. 20 lakh
(e) Rs. 5 lakh to Rs. 10 lakh

89. Who can set up an SEZ?
(a) Private sector
(b) Public sector
(c) State government
(d) All of the above
(e) Only (a) and(b)

90. Securitization act 2002 is enables the banks to issue notices to defaulters who have to pay the debts within _____ days.
(a) 90 days
(b) 60 days
(c) 30 days
(d) 120 days
(e) None of the above

91. _____ is vested with the responsibility of conducting monetary policy.
(a) RBI (b) SBI (c) NABARD
(d) SIDBI (e) Finance Ministry

92. In which year the Reserve Bank of India (RBI) Act, 1934 was amended to provide a statutory basis for the implementation of the flexible inflation targeting framework?
(a) May 2013 (b) May 2014 (c) May 2015
(d) May 2016 (e) May 2012

93. Which scheme/act has enables an expeditious and inexpensive forum to bank customers for resolution of complaints relating to certain services rendered by banks?
(a) Reserve Bank of India Act, 1934
(b) Banking Regulation Act, 1949
(c) Securitization Act 2002
(d) FEMA
(e) Banking Ombudsman Scheme

94. Many a times we read about Special Drawing Rights (SDR) in newspapers. As per its definition, SDR is a monitory unit of reserve asset of which the following organization/agency?
(a) World Bank
(b) International Monetary Fund (IMF)
(c) Asian Development Bank (ADB)
(d) Reserve Bank of India (RBI)
(e) None of the above

95. IBA adopts a consultative approach to give its views on any issue pertaining to banking sector. What is the meaning of "I" in IBA?
(a) International
(b) Institute
(c) Investment
(d) Indian
(e) Increase

96. IBA stands for-
(a) Indian Banks' Allocation
(b) Indian Banks' Association
(c) Institute Banks' Association
(d) Indian Banks' Assembly
(e) Indian Billing Association

97. in its fifth bi-monthly monetary policy review of the present financial year, What is the present Repo Rate?
(a) 7.00% (b) 5.15% (c) 6.50%
(d) 6.75% (e) None of the above

98. Which among the following rates is not the policy rate of RBI?
(a) Repo Rate
(b) Reverse Repo Rate
(c) Bank Rate
(d) Marginal Standing Facility Rate
(e) Cash Reserve Ratio

99. The Banking Ombudsman is a senior official appointed by.....?
(a) Indian Government
(b) President of India
(c) Chief Justice of India
(d) Reserve Bank of India
(e) Finance Ministry

100. As on January 2020, there are _____ Banking Ombudsman centre located in India.
(a) 20 (b) 19 (c) 18
(d) 17 (e) 22

101. The International Bank for Reconstruction and Development (IBRD) is an international financial institutions that offer loans to-
(a) Multinational Banks
(b) Multinational Financial Institutions
(c) Middle Income Developing Countries
(d) Non Government Organizations
(e) None of the given options is true

102. Name the First Foreign Bank in India.
(a) Chinatrust Commercial Bank
(b) United Overseas Bank
(c) Federal Bank
(d) Comptoir d'Escompte de Paris
(e) Landesbank Baden-Württemberg

103. The promoters of Small Finance Banks should have _____ experience in banking and finance?
(a) 08 years (b) 11 years (c) 07 years
(d) 10 years (e) 15 years

104. The Reserve Bank of India (RBI) is all set to make LEI compulsory for companies having aggregate fund-based and non-fund based exposure over Rs 5 crore. What does LEI stand for?
(a) Legal Entity Identifier
(b) Legal Eminent Identity
(c) Legal Eminent Income
(d) Legal Entity Identity
(e) Legal Effective Identity

105. Which of the following is the country's largest custodian and depository participant?
(a) CIBIL (b) SEBI (c) NABARD
(d) SHCIL (e) None of the given options is true

106. 'CAR' is a measurement of a bank's available capital expressed as a percentage of a bank's risk-weighted credit exposures. What does mean stand for 'CAR'?
(a) capital adequacy ratio
(b) cash adequacy ratio
(c) capital adjustment ratio
(d) capital asset ratio
(e) credit adequacy ratio

107. Which Bank has launched 10-second paperless instant loan Scheme?
(a) HDFC (b) SBI (c) PNB
(d) IDBI (e) ICICI

108. As on January 2020, What is the present MSF rate?
(a) 5.50 percent (b) 5.75 percent (c) 6.75 percent
(d) 6.50 percent (e) 5.40 percent

109. Deposits which can be withdrawn by a customer without notice is called?
(a) Time Deposits (b) Demand Deposits
(c) Variable Deposits (d) Low cost Deposits
(e) None of these

110. Loan and Advances of a bank come under which of the following category?
(a) Assets
(b) Liabilities
(c) Deposits
(d) All of the Above
(e) None of these

111. Which Bank has launched its mobile banking app called BPay?
(a) AU Small Finance Bank
(b) India Post Payments Bank
(c) Fino Payments Bank
(d) Airtel Payments Bank
(e) ICICI Bank

112. Where is the head office of European Bank for Reconstruction & Development (EBRD)?
(a) London (b) Paris (c) Vienna
(d) Geneva (e) New York

113. The Ministry of Finance increased the maximum age of joining the National Pension System (NPS) from the existing 60 years to _____ under NPS - Private Sector.
(a) 62 years (b) 63 years (c) 64 years
(d) 65 years (e) 66 years

114. India Infrastructure Finance Company Ltd (IIFCL) is a wholly-owned _____ company set up in 2006.
(a) NABARD (b) SEBI
(c) RBI (d) Finance Ministry
(e) Government of India

115. How much cash can payment be made to the beneficiary in India under MTSS?
(a) Rs 2, 00,000 (b) Rs 50,000 (c) Rs 1, 00,000
(d) Rs 10,000 (e) None of the above

116. If cheque is issued by a bank in the same city as the payee, the cheque will be called?
(a) Outstation Cheque
(b) Local Cheque
(c) At par Cheque
(d) Multicity Cheque
(e) None of the given options is true

117. What is the maximum period of maturity prescribed for Commercial Paper (CP)?
(a) 10 years (b) 06 years (c) 01 Year
(d) 02 years (e) 05 years

118. The PCA framework is applicable only to _____.
(a) Non-Banking Financial Companies
(b) Financial Management Institutions
(c) Commercial banks
(d) Co-operative Banks
(e) None of the given options is true

119. Where is the head office of IndusInd Bank?
(a) Hyderabad (b) Kolkata (c) New Delhi
(d) Mumbai (e) Chennai

120. _____ account is opened by the investor while registering with an investment broker.
(a) Fixed Deposit Account
(b) Savings Bank Account
(c) Recurring Account
(d) Demat Account
(e) None of the given options is true

121. Maximum limit (amount) that can be invested in Kisan Vikas Patra (KVP) Certificate is?
(a) Rs.5,000 (b) Rs.10,000 (c) Rs.25,000
(d) Rs.50,000 (e) No limit

122. The UIDAI or Unique Identification Authority of India has launched a new mobile app, called_____, that will negate the need to carry the Aadhaar card in wallets.
(a) SmartAadhaar (b) mAadhaar
(c) MyAadhaar (d) AadhaarWallet
(e) None of these

123. The Index of Industrial Production (IIP) is compiled and released by
(a) CII (b) ASSOCHAM (c) RBI
(d) EXIM BANK (e) CSO

124. A facility under which scheduled commercial banks can borrow additional amount of overnight money from the Reserve Bank by dipping into their Statutory Liquidity Ratio (SLR). It is called?
(a) Repo Rate
(b) Reverse Repo Rate
(c) Bank Rate
(d) Marginal Standing Facility (MSF)
(e) Liquidity Adjustment Facility (LAF)

125. The State Bank of India has introduced a loyalty program for its valued customers. This program is called as _____.
(a) State Bank Loyality
(b) State Bank Sambhandh
(c) State Bank Mol
(d) State Bank Rewardz
(e) State Bank Samarth

126. The Postal Service Board is _____ of the Department of Posts.
(a) apex management body
(b) regulatory management body
(c) financial management body
(d) statutory authority
(e) None of the given options is true

127. As on January 2020, What is the current Policy Reverse Repo Rate?
(a) 6.25 percent (b) 6.50 percent (c) 6.00 percent
(d) 5.50 percent (e) 4.90 percent

128. When the growth of GDP in a country slows down suddenly, people start losing their jobs and the situation continues for several weeks, what name is given to this state of economy?
(a) Inflation (b) Recession (c) Deflation
(d) Economic boom (e) None of these

129. Banks in India normally do not have to deal with the issues related to
(a) customer complaints
(b) cross complaints
(c) payment and settlement system
(d) Intellectual property system
(e) cases of insolvency

130. Taxpayers who are earning between _____ have to pay an additional surcharge of 10% on their total income which was not the case earlier.
(a) Rs.50 lacs to Rs.1 crore
(b) Rs.60 lacs to Rs.3 crore
(c) Rs.40 lacs to Rs.5 crore
(d) Rs.05 lacs to Rs.1 crore
(e) Rs.10 lacs to Rs.2 crore

131. When more than one bank is allowing credit facilities to one party in coordination with each other under a formal arrangement, the arrangement is generally known as_____
(a) Consortium (b) Syndication
(c) Multiple Banking (d) Participation
(e) None of these

132. The World Business Council for Sustainable Development (WBCSD) headquarters in _____.
(a) Paris, France (b) New York, USA
(c) Geneva, Switzerland (d) Jakarta, Indonesia
(e) Beijing, China

133. What is the maximum period for which a term deposit can be normally opened?
(a) 8 years (b) 7 years (c) 9 years
(d) 10 years (e) 12 years

134. Special Drawing Rights (SDR) are supplementary foreign exchange reserve assets defined and maintained by-
(a) Asian Development Bank (ADB)
(b) Reserve Bank of India (RBI)
(c) World Bank (WB)
(d) International Monetary Fund (IMF)
(e) Asian Infrastructure Investment Bank (AIIB)

135. Ujjivan Small Finance Bank Limited is a bank licensed under _____ of the Banking Regulation Act, 1949 to carry out small finance bank business in India.
(a) section 25 (b) section 12 (c) section 18
(d) section 22 (e) section 47

136. When there is a difference between all receipts and expenditure of the Government of India both capital and revenue it is called-
(a) Revenue Deficit
(b) Budgetary Deficit
(c) Zero Budgeting
(d) Trade Gap
(e) Balance of Payment Problem

137. Under which act NBFCs are incorporated?
(a) Banking Regulation Act, 1949
(b) Companies Act, 1956
(c) RBI Act 1934
(d) SBI Act 1955
(e) None of the given options is true

138. ____ is a standard format of Bank Identifier Codes (BIC) for banks to identify banks and financial institutions globally.
(a) RTGS (b) IFSC (c) NEFT
(d) SWIFT (e) None of the given options is true

139. Which of the following is mainly used by the banks in order to meet their temporary requirement of Cash on a daily basis?
(a) Commercial Paper
(b) Certificate of Deposit
(c) Collateralized Borrowing and Lending Obligations (CBLO)
(d) Call Money
(e) None of the given options is true

140. The government launched the 'Bharat 22' ETF managed by ICICI Prudential Mutual Fund, targeting an initial amount of about Rs8,000 crore. What is the meaning of "T" in ETF?
(a) Timing (b) Transaction (c) Traded
(d) Treaty (e) Trended

141. The Board of Industrial and Financial Reconstruction (BIFR) came into existence in-
(a) 1999 (b) 1995 (c) 1991
(d) 1987 (e) 1982

142. Name the First Universal Bank in India.
(a) SBI (b) ICICI Bank (c) PNB
(d) HDFC (e) Axis Bank

143. TRIPS and TRIMS are associated with which of following organization-
(a) WTO (b) IMF (c) IDA
(d) AIIB (e) WHO

144. Treasury bills are issued in India by _____
(a) RBI
(b) State Government
(c) Government of India
(d) SEBI
(e) NABARD

145. Which of the following is an independent commodity exchange based in Mumbai?
(a) MGEX (b) MCE (c) MDEX
(d) MCX (e) MEX

146. ICRA, CRISIL, and Standard and Poor's (S&P) are?
(a) Financial Institutions
(b) NGOs
(c) NBFCs
(d) Credit Rating Agencies
(e) None of the given options is true

147. With reference to a cheque which of the following is the 'drawee bank'?
(a) The bank that collects the cheque
(b) The payee's bank
(c) The endorser's bank
(d) The bank upon which the cheque is drawn
(e) None of the given options is true

148. Where is the headquarter of Deutsche Bank?
(a) Taiwan (b) Germany (c) France
(d) Netherland (e) None of these

149. When was the currency system in India converted into decimal system?
(a) April 01st 1959
(b) April 01st 1957
(c) April 01st 1955
(d) April 01st 1953
(e) April 01st 1951

150. Where is the headquarter of ABN AMRO Bank?
(a) Taiwan (b) Germany (c) France
(d) Netherland (e) None of these

151. NPCI is an umbrella organization for all retail payments system in India. It was set up with the guidance and support of the Reserve Bank of India (RBI) and Indian Banks' Association (IBA). What does NPCI stands for-
(a) National Payments Corporation of Industry
(b) National Payments Council of India
(c) Nominal Payments Corporation of India
(d) National Payments Corporation of India
(e) National Product Corporation of India

152. In which among the following years NPCI was incorporated-
(a) December 2008 (b) January 2006
(c) April 2010 (d) July 2012
(e) None of the above

153. The Bank for International Settlements (BIS) is the world's oldest international financial organization. BIS was established on-
(a) 26th May 1961 (b) 01st October 1949
(c) 14th February 1914 (d) 21st August 1945
(e) 17th May 1930

154. Where is the head office of Bank for International Settlements (BIS)?
(a) Zurich, Switzerland (b) New York, USA
(c) Basel, Switzerland (d) Berlin, Germany
(e) Geneva, Switzerland

155. Under which act NPCI was incorporated as a Section 8?
(a) Banking Regulation Act, 1949
(b) Companies Act 2013
(c) Reserve Bank of India Act, 1934
(d) Societies Registration Act, 1860
(e) None of the above

156. Who was the first Governor of RBI?
(a) C.D.Deshmukh (b) James Braid Taylor
(c) Osborne Smith (d) Raghuram Rajan
(e) None of the above

157. Scheduled Banks of India are those banks, which are?
(a) Included in First Schedule of RBI Act, 1934
(b) Not included in First Schedule of RBI Act, 1934
(c) Included in Second Schedule of RBI Act, 1934
(d) Not included in Second Schedule of RBI Act, 1934
(e) None of the above

158. Which of the following banks is not merged with SBI in April 2017?
(a) State Bank of Bikaner & Jaipur
(b) State Bank of Travancore
(c) State Bank of Mysore
(d) Axis Bank
(e) None of the above

159. Which of the following bank is not a private sector bank in India?
(a) Federal Bank (b) Yes Bank
(c) IndusInd Bank (d) UCO Bank
(e) None of the above

160. Which private sector bank is recently merged with Kotak Mahindra Bank (KMB)?
(a) ING Vysya Bank
(b) KarurVysya Bank
(c) Lakshmi Vilas Bank
(d) Jammu and Kashmir Bank
(e) None of the above

161. For providing postal services, the whole country has been divided into _____ postal circles.
(a) 21 (b) 25 (c) 23
(d) 27 (e) 29

162. Which two private sector banks have got license from RBI in 2014?
(a) Bandhan and Yes Bank
(b) Yes Bank and IDFC
(c) IDFC Bank and Bandhan Bank
(d) Axis Bank and ICICI
(e) None of the given options is true

163. Who is 25th governor of the Reserve Bank of India?
(a) Urjit Patel
(b) Raghuram Rajan
(c) Shaktikanta Das
(d) Mario Draghi
(e) None of the given options is true

164. Which bank first introduced Automated Teller Machine (ATM) in India (1987)?
(a) SBI
(b) Punjab National Bank
(c) Federal Bank
(d) HSBC
(e) None of the given options is true

165. Bank of Rajasthan was merged with which private sector bank?
(a) ICICI Bank
(b) Axis Bank
(c) HDFC Bank
(d) Kotak Mahindra Bank
(e) None of the given options is true

166. PSLCs are tradable certificates issued against priority sector loans of banks. What does meaning of "Cs" in PSLCs?
(a) Cess (b) Cities (c) Census
(d) Certificates (e) None of the above

167. The Banking Ombudsman Scheme is introduced under Section 35 A of the Banking Regulation Act, 1949 by RBI with effect from -
(a) 1995 (b) 1999 (c) 1990
(d) 1982 (e) 1988

168. MTSS is a way of transferring personal remittances from abroad to beneficiaries in India. What does MTSS stand for-
(a) Mobile Transfer Service Scheme
(b) Money Transfer System Scheme
(c) Money Timing Service Scheme
(d) Market Transfer Service Scheme
(e) Money Transfer Service Scheme

169. IFS is software developed by UPU to coordinate international remittance services among the partner countries. At present the service is operational with La Poste Group, France and UAE. IFS stands for-
(a) International Financial Scheme
(b) Indian Financial System
(c) International Fund System
(d) International Financial System
(e) International Financial Service

170. RDA is a channel to receive cross-border remittances from overseas jurisdictions. What does meaning of "A" in RDA?
(a) Account (b) Assembly (c) Arrangement
(d) Association (e) Amount

171. NABARD was dedicated to the service of the nation by the late Prime Minister Smt. Indira Gandhi on-
(a) 12th July 1982 (b) 01st January 1949
(c) 19th July 1980 (d) 15th April 1969
(e) 05th November 1982

172. The mission of NABARD is Promote sustainable and equitable agriculture and rural prosperity through effective credit support, related services, institution development and other innovative initiatives. What is meaning of "R" IN NABARD?
(a) Regional (b) Rural (c) Reconstruction
(d) Revised (e) Remittance

173. SAT is a statutory body established under the provisions of Section 15K of the Securities and Exchange Board of India (SEBI) Act, 1992. SAT stands for-
(a) Securities Appellate Tribunal
(b) Securities Appellate Treaty
(c) Securities Association Tribunal
(d) Saving Appellate Tribunal
(e) None of the above

174. The Securities and Exchange Board of India (SEBI) was established on-
(a) 12th April 1999 (b) 12th April 1992
(c) 12th April 1949 (d) 12th April 1990
(e) 12th April 1995

175. NABARD was set up with an initial capital of-
(a) Rs 200 crore (b) Rs 1500 crore
(c) Rs 500 crore (d) Rs 100 crore
(e) Rs 1000 crore

176. At present many public sector banks and one private sector bank are authorized to handle the Senior Citizens Savings Scheme (SCSS), 2004.Name the private sector bank, which are authorized to handle the Senior Citizens Savings Scheme (SCSS), 2004?
(a) ICICI bank (b) HDFC Bank (c) Axis Bank
(d) Yes Bank (e) Kotak Mahindra Bank

177. The Government of India has enacted the Micro, Small and Medium Enterprises Development (MSMED) Act, 2006 in terms of which the definition of micro, small and medium enterprises. As under a micro enterprise is an enterprise where investment in plant and machinery does not exceed.....?
(a) Rs. 100 lakh (b) Rs. 15 lakh (c) Rs. 25 lakh
(d) Rs. 50 lakh (e) None of the above

178. Commercial Paper (CP) is an unsecured money market instrument issued in the form of a promissory note. In which year Commercial Paper was introduced in India?
(a) 1975 (b) 1990 (c) 1985
(d) 1955 (e) 1980

179. Which Bank of India maintains the Principal Accounts of Central as well as State Governments at its Central Accounts Section?
(a) IDBI (b) SBI (c) SIDBI
(d) NABARD (e) RBI

180. Who are eligible to issue Commercial Paper (CP)?
(a) Corporate
(b) Primary dealers (PDs)
(c) All-India Financial Institutions (FIs)
(d) All of the above
(e) None of the above

181. Under OLTAS, only a Single Copy Challan is used with a tear off portion for the Tax Payer. What does OLTAS stand for-?
(a) On-line Tax Accounting Service
(b) On-line Tax Amounting System
(c) On-line Timing Accounting System
(d) On-line Tax Association Service
(e) On-line Tax Accounting System

182. What is the minimum period of maturity prescribed for Commercial Paper (CP)?
(a) 17 Months (b) 14 Days (c) 01 Year
(d) 07 days (e) 05 years

183. Which banks are insured by the Deposit Insurance and Credit Guarantee Corporation (DICGC)?
(a) Foreign Banks functioning in India
(b) Local Area Banks
(c) Regional Rural Banks
(d) All of the above
(e) None of the above

184. _____ is a quick and easy way of transferring personal remittances from abroad to beneficiaries in India by India Post.
(a) EMO network
(b) International Financial System
(c) Money Transfer Service Scheme
(d) National Electronic Funds Transfer
(e) Society for Worldwide Interbank Financial Telecommunication

185. Each depositor in a bank is insured by DICGC upto a maximum of _____ for both principal and interest amount held by him in the same capacity and same right as on the date of liquidation/cancellation of bank's licence or the date on which the scheme of amalgamation/merger/reconstruction comes into force.
(a) Rs.1, 00,000 (b) Rs.2, 00,000 (c) Rs.3, 00,000
(d) Rs.4, 00,000 (e) Rs.5, 00,000

186. Which organization holding the highest/maximum share in NABARD?
(a) Finance Ministry
(b) Government of India
(c) Reserve Bank of India
(d) Securities and Exchange Board of India
(e) None of the above

187. Who is the present Chairman of SEBI?
(a) Ajay Tyagi (b) KshatrapatiShivaji
(c) Yaduvendra Mathur (d) Shaktikanta Das
(e) Urjit Patel

188. At the instance of Government of India Reserve Bank of India (RBI) was constituted a committee to review the arrangements for institutional credit for agriculture and rural development (CRAFICARD) on 30 March 1979, under the Chairmanship of-
(a) V K Malhotra (b) C Rangarajan
(c) B Sivaraman (d) Hilton Young
(e) None of the above

189. The Government of India, the concerned State Government and the bank, which had sponsored the RRB contributed to the share capital of RRBs in the proportion of _____ respectively.
(a) 50%, 15% and 35% (b) 50%, 35% and 15%
(c) 35%, 50% and 35% (d) 15%, 50% and 35%
(e) None of the above

190. Regional Rural Banks (RRBs) were established in 1975 under the provisions of the Ordinance promulgated on the 26th September 1975 and followed by which act?
(a) Companies Act, 1956
(b) RRBs Act, 1976
(c) RBI Act, 1935
(d) Banking Regulation Act, 1949
(e) None of the above

191. FICCI history is closely interwoven with India's struggle for independence, its industrialization, and its emergence as one of the most rapidly growing global economies. What is meaning of "F" in FICCI?
(a) Follower (b) Federal (c) Financial
(d) Federation (e) None of the above

192. Who was the first Chairman and Managing Director (CMD) of Exim Bank?
(a) Ravneet Kaur (b) TCA Ranganathan
(c) RC Shah (d) Kalyan Banerji
(e) Yaduvendra Mathur

193. ECGC Ltd. wholly owned by Government of India, was set up in _____ with the objective of promoting exports from the country by providing Credit Risk Insurance and related services for exports.
(a) 1935 (b) 1982 (c) 1964
(d) 1949 (e) 1957

194. ECGC is essentially an export promotion organization, seeking to improve the competitiveness of the Indian exporters by providing them with credit insurance covers. What is meaning of "G" in ECGC?
(a) Guarantee (b) General (c) Government
(d) Grameen (e) None of the above

195. AIIB is a new multilateral financial institution founded to bring countries together to address the daunting infrastructure needs across Asia. AIIB stands for-
(a) Asian Infrastructure Investment Bureau
(b) Asian Infrastructure Investment Bank
(c) Association Infrastructure Investment Bank
(d) Asian International Investment Bank
(e) None of the above

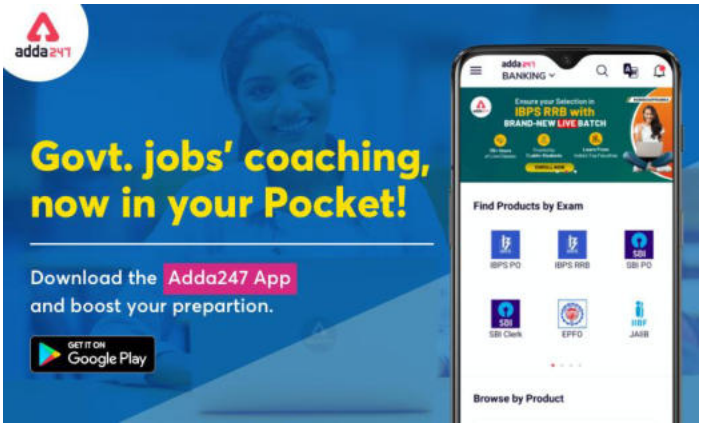
196. The World Bank Group consists of how many organizations-
(a) One (b) Two (c) Three
(d) Four (e) Five

197. The World Bank is like a cooperative, made up of ---------- member countries. These member countries, or shareholders, are represented by a Board of Governors, who are the ultimate policymakers at the World Bank.
(a) 189 (b) 193 (c) 159
(d) 173 (e) 187

198. Name the agency, which is an agency to provide 'soft-loans' to developing countries?
(a) Asian Infrastructure Investment Bank (AIIB)
(b) Organization of the Petroleum Exporting Countries (OPEC)
(c) Asian Development Bank (ADB)
(d) World Trade Organization (WTO)
(e) International Development Association (IDA)

199. What is the authorized capital of New Development Bank (NDB)?
(a) USD 200 billion (b) USD 300 billion
(c) USD 500 billion (d) USD 100 billion
(e) None of the above

200. The first Board of Governors meeting of the BRICS New Development Bank was held in _____ on July 7, 2015 where the Bank formally came into existence as a legal entity.
(a) Brazil (b) Russia (c) South Africa
(d) India (e) China



Solutions

1. (b); A global depository receipt (GDR) is a certificate issued by a depository bank, which purchases shares of foreign companies and deposits it on the account. They are the global equivalent of the original American depository receipts (ADR) on which they are based.

2. (e); Investment banking is a specific division of banking related to the creation of capital for other companies, governments and other entities.

3. (d); The Varishtha Pension Bima Yojana 2017, a pension scheme for senior citizens, was approved by the Union Cabinet. Varishtha Pension Bima Yojana 2017 provides an assured pension based on a guaranteed rate of return of 8 per cent for 10 years.

4. (c); Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE), has established itself as an important institution in facilitating flow of collateral free credit to units in micro and small enterprise (MSE) sector in the last 17 years of its existence. Loan disbursed under MUDRA yojana is insured by CGTMSE.

5. (b); The Multilateral Investment Guarantee Agency is an international financial institution which offers political risk insurance and credit enhancement guarantees. The Head Office of MIGA is in Washington DC, USA.

6. (c); CRISIL pioneered the first corporate sector rating in 1988. one out of every two companies in India is rated by CRISIL. We have an unmatched coverage of about 70 sectors belonging to 22 industry groups. CRISIL is a analytical company providing ratings, research, and risk and policy advisory services.

7. (c); In 1969 the Indian government nationalised 14 major private banks; one of the big banks was Bank of India.

8. (e); Amortization is an accounting term that refers to the process of allocating the cost of an intangible asset over a period of time. It also refers to the repayment of loan principal over time.

9. (b); National Institute of Securities Markets (NISM) is a public trust, established by the Securities and Exchange Board of India (SEBI), the regulator for securities markets in India. It is located in Navi Mumbai, India.

10. (d); No tax would be deducted at source for PF withdrawals of up to Rs. 50,000. The government has notified raising the threshold limit of PF withdrawal for deduction of tax (TDS) from existing Rs. 30,000 to Rs. 50,000.

11. (a); Credit card facility has not given by Payment Banks.

12. (e); An Equity Linked Savings Scheme (ELSS) is a diversified equity mutual fund which has a majority of the corpus invested in equities. Since it is an equity fund, returns from an ELSS fund reflect returns from the equity markets.

13. (b); The compound annual growth rate (CAGR) is a useful measure of growth over multiple time periods. It can be thought of as the growth rate that gets you from the initial investment value to the ending investment value if you assume that the investment has been compounding over the time period.

14. (a); NBFC & MFI in India, The working and operations of NBFCs are regulated by the Reserve Bank of India (RBI) within the framework of the Reserve Bank of India Act, 1934.

15. (a); Structured Financial Messaging System (SFMS) is a secure messaging standard developed to serve as a platform for intra-bank and inter-bank applications. It is an Indian standard similar to SWIFT which is the international messaging system used for financial messaging globally.

16. (e); A credit risk is the risk of default on a debt that may arise from a borrower failing to make required payments. In the first resort, the risk is that of the lender and includes lost principal and interest, disruption to cash flows, and increased collection costs.

17. (e); Liquidity Adjustment Facility (LAF) is a monetary policy tool which allows banks to borrow money through repurchase agreements or repos.

18. (a); The call money market (CMM) the market where overnight (one day) loans can be availed by banks to meet liquidity. Banks who seeks to avail liquidity approaches the call market as borrowers and the ones who have excess liquidity participate there as lenders.

19. (b); An Initial Coin Offering (ICO) is used by the startups to bypass the rigorous and regulated capital-raising process required by venture capitalists or banks.
More accurately known as token sales, ICOs are unregulated means of raising money from public investors, to finance a startup.

20. (e); CASA ratio of a bank is the ratio of deposits in current and saving accounts to total deposits. A higher CASA ratio indicates a lower cost of funds, because banks do not usually give any interests on current account deposits and the interest on saving accounts is usually very low 3-4%.

21. (a); Import substitution industrialization is a trade and economic policy which advocates replacing foreign imports with domestic production.

22. (b); To make the payments process easier the Government of India has launched the Bharat QR Code payments transfer mechanism for cashless electronics payments. Over the past few years a lot of people have moved on to the cashless payment methods using debit and credit cards.

23. (c); Working to foster global monetary cooperation, secure financial stability for member countries is not a function of RBI.

24. (d); Disinflation is a slowing in the rate of price inflation. It is used to describe instances when the inflation rate has reduced marginally over the short term. Although it is used to describe periods of slowing inflation, disinflation should not be confused with deflation, which can be harmful to the economy.

25. (e); An oligopoly is a market form wherein a market or industry is dominated by a small number of sellers (oligopolists).

26. (c); In modern business practice, a letter of credit (LC) also known as a Documentary Credit, is a written commitment by a bank issued after a request by an importer (foreign buyer) that payment will be made to the beneficiary (exporter) provided that the terms and conditions.

27. (b); Banking Correspondents (BCs) are individuals/entities engaged by a bank in India (commercial banks, Regional Rural Banks (RRBs) and Local Area Banks (LABs)) for providing banking services in unbanked / under-banked geographical territories. A banking correspondent works as an agent of the bank and substitutes for the brick and mortar branch of the bank. BCs are paid by that particular bank.

28. (e); Rs 1 lakh is maximum limit for saving accounts in IPPB.

29. (a); The Kisan Credit Card (KCC) scheme is a credit scheme introduced in August 1998 by Indian banks. This model scheme was prepared by the National Bank for Agriculture and Rural Development (NABARD) on the recommendations of R.V.GUPTA to provide term loans and agricultural needs

30. (e); The Loan-To-Value ratio (LTV ratio) is a lending risk assessment ratio that financial institutions and others lenders examine before approving a mortgage.

31. (d); The City Union Bank Limited is an Indian bank. Kumbakonam, Tamil Nadu is the headquaters of City Union Bank.

32. (b); The State Expert Appraisal Committee (SEAC)'s function on the principle of collective responsibility. The Chairperson shall endeavor to reach a consensus in each case, and if consensus cannot be reached, the view of the majority shall prevail.

33. (a); Bandhan Bank Limited is an Indian banking and financial services company headquartered in Kolkata, West Bengal. Bandhan, which started as a micro-finance company in 2001, received banking licence by Reserve Bank of India in 2014.

34. (a); The Society for Worldwide Interbank Financial Telecommunication (SWIFT) provides a network that enables financial institutions worldwide to send and receive information about financial transactions in a secure, standardized and reliable environment.

35. (b); In money market, the amount that is lent for one day is known as "call money" and, if it exceeds one day or two days to 14 days is referred to as "notice money."

36. (b); The interest rate risk is the risk that an investment's value will change due to a change in the absolute level of interest rates, in the spread between two rates, in the shape of the yield curve, or in any other interest rate relationship. Such changes usually affect

securities inversely and can be reduced by diversifying (investing in fixed-income securities with different durations) or hedging (such as through an interest rate swap).

37. (d); The RBI has allowed Asset Reconstruction Companies (ARCs) to hold more than 26% post conversion of debt into equity in companies undergoing restructuring.

38. (b); The Banking Codes and Standards Board of India was registered as a society under the Societies Registration Act, 1860 in February 2006. It functions as an independent and autonomous body. Membership of BCSBI is voluntary and open to scheduled banks.

39. (e); The National Summary Data Page (NSDP) links are intended to provide quick access to a single comprehensive source of economic and financial data consistent with the data categories and components described in the subscriber's metadata. Additionally, many of the NSDPs include further links to additional data or information on other national Internet data sites.

40. (d); Pluto Exchange launches the India's first bitcoin trading app for transacting in virtual currencies. The Pluto Exchange mobile app offers a solution to the coordination problem between payment processors, financial gateways and banks. Pluto Exchange will enable transactions using mobile numbers only. With this, by using a four-digit personal identification number (PIN), users can now buy, sell, store and spend bitcoins via a mobile number.

41. (e); From 01.07.2019, interest rates are as follows:-
7.6 % compounded annually
Amount Invested doubles in 113 months (9 years & 5 months)

42. (b); Arrangement of selling an insurance product through banks is known as Bancassurance.

43. (d); Regulator for the Indian Corporate Debt Market is the Securities and Exchange Board of India (SEBI). SEBI controls bond market and corporate debt market in cases where entities raise money from public through public issues.

44. (c); Know your customer(KYC) is an important step developed globally to prevent identity theft, financial fraud, money laundering and terrorist financing.

45. (d); There is no requirement for any initial deposit for opening a BSBDA.

46. (a); The minimum amount to be remitted through RTGS is Rs2 lakh.

47. (a); RNBCs stands for Residuary Non-Banking Companies.

48. (c); The term bad debts usually refers to accounts receivable (or trade accounts receivable) that will not be collected.

49. (b); Government of India created the RIDF in NABARD in 1995-96, with an initial corpus of Rs.2,000 crore. With the allocation of Rs.28,000 crore for 2018-19 under RIDF XXIV, the cumulative allocation has reached Rs.3,20,500 crore, including Rs. 18,500 crore under Bharat Nirman.

50. (b); A savings account is an account maintained by a bank or other financial institutions for individuals to save money and earn interest on the cash held in the account.

51. (d); Shanghai, China is the headquartered of New Development Bank (NDB).

52. (a); With an initial funding of $912.7 million, IDA was launched on September 24, 1960 with 15 signatory countries - Australia, Canada, China, Germany, India, Italy, Malaysia, Norway, Pakistan, Sudan, Sweden, Thailand, United Kingdom, United States, and Vietnam.

53. (e); National Institute of Bank Management (NIBM) was established in 1969 by the Reserve Bank of India, in consultation with the Government of India, as an autonomous apex institution for research, training, education and consultancy in bank management.

54. (d); NIBM stands for National Institute of Bank Management.

55. (b); Pune, Maharashtra is the headquartered of National Institute of Bank Management (NIBM).

56. (a); National Electronics Funds Transfer (NEFT) is an electronic fund transfer system that operates on a Deferred Net Settlement (DNS) basis which settles transactions in batches.

57. (b); The Reserve Bank of India was established on April 1, 1935 in accordance with the provisions of the Reserve Bank of India Act, 1934. The Central Office of the Reserve Bank was initially established in Calcutta but was permanently moved to Mumbai in 1937.

58. (c); The Reserve Bank of India (RBI) is vested with the responsibility of conducting monetary policy. This responsibility is explicitly mandated under the Reserve Bank of India Act, 1934.

59. (d); Marginal Standing Facility (MSF) is a facility under which scheduled commercial banks can borrow additional amount of overnight money from the Reserve Bank by dipping into their Statutory Liquidity Ratio (SLR).

60. (e); The Hon'ble Prime Minister of India, while presenting the Union Budget for 1987-88 on February 28, 1987 announced the decision to establish the National Housing Bank (NHB) as an apex level institution for housing finance. NHB was set up on July 9, 1988 under the National Housing Bank Act, 1987.

61. (a); Non -performing Assets (NPA) is an asset, including a leased asset, becomes non-performing when it ceases to generate income for the bank.

62. (e); NPA stands for Non -performing Assets.

63. (a); MUDRA, which stands for Micro Units Development & Refinance Agency Ltd, is a financial institution being set up by Government of India for development and refinancing micro units' enterprises.

64. (d); MUDRA, which stands for Micro Units Development & Refinance Agency Ltd, is a financial institution being set up by Government of India for development and refinancing micro units' enterprises. It was announced by the Hon'ble Finance Minister while presenting the Union Budget for FY 2016. The purpose of MUDRA is to provide funding to the non-corporate small business sector through various Last Mile Financial Institutions like Banks, NBFCs and MFIs.

65. (d); India was one of the first in Asia to recognize the effectiveness of the Export Processing Zone (EPZ) model in promoting exports, with Asia's first EPZ set up in Kandla, Gujarat in 1965.

66. (a); India was one of the first in Asia to recognize the effectiveness of the Export Processing Zone (EPZ) model in promoting exports, with Asia's first EPZ set up in Kandla, Gujarat in 1965.

67. (c); A non -performing asset (NPA) is a loan or an advance where interest and/or installment of principal remain overdue for a period of more than 90 days in respect of a term loan.

68. (d); A non -performing asset (NPA) is a loan or an advance where;

1. interest and/or installment of principal remain overdue for a period of more than 90 days in respect of a term loan.
2. the account remains 'out of order' in respect of an Overdraft/Cash Credit (OD/CC).
3. the bill remains overdue for a period of more than 90 days in the case of bills purchased and discounted.
4. the instalment of principal or interest there on remains overdue for two crop seasons for short duration crops.
5. the instalment of principal or interest there on remains overdue for one crop season for long duration crops.
6. the amount of liquidity facility remains outstanding for more than 90 days, in respect of a securitisation transaction undertaken in terms of guidelines on securitisation dated February 1, 2006.
7. in respect of derivative transactions, the overdue receivables representing positive mark-to-market value of a derivative contract, if these remain unpaid for a period of 90 days from the specified due date for payment.

69. (d); MUDRA, which stands for Micro Units Development & Refinance Agency Ltd, is a financial institution being set up by Government of India for development and refinancing micro units' enterprises. It was announced by the Hon'ble Finance Minister while presenting the Union Budget for FY 2016. The purpose of MUDRA is to provide funding to the non-corporate small business sector through various Last Mile Financial Institutions like Banks, NBFCs and MFIs.

70. (a); MUDRA Bank, a Non Banking Finance Company as MUDRA Ltd has been set up as a subsidiary of SIDBI.

71. (c); India was one of the first in Asia to recognize the effectiveness of the Export Processing Zone (EPZ) model in promoting exports, with Asia's first EPZ set up in Kandla, Gujarat in 1965. With a view to overcome the shortcomings experienced on account of the multiplicity of controls and clearances; absence of world-class infrastructure, and an unstable fiscal regime and with a view to attract larger foreign investments in India, the Special Economic Zones (SEZs) Policy was announced in April 2000.

72. (b); SEZs stands for Special Economic Zones.

73. (b); Banks are required to classify non-performing assets further into the following three categories based on the period for which the asset has remained non-performing and the realizability of the dues:
1. Sub-standard Assets
2. Doubtful Assets
3. Loss Assets

74. (b); Banks are required to classify non-performing assets further into the following three categories based on the period for which the asset has remained non-performing and the realisability of the dues:
1. Sub-standard Assets
2. Doubtful Assets
3. Loss Assets

75. (c); PMMY stands for Pradhan Mantri MUDRA Yojana.

76. (c); MUDRA gives loan in three categories. The categories have been named 'Shishu', 'Kishor' and 'Tarun'.

77. (b); Arun is not a loan category of MUDRA bank.

78. (e); India was one of the first in Asia to recognize the effectiveness of the Export Processing Zone (EPZ) model in promoting exports, with Asia's first EPZ set up in Kandla, Gujarat in 1965. With a view to overcome the shortcomings experienced on account of the multiplicity of controls and clearances; absence of world-class infrastructure, and an unstable fiscal regime and with a view to attract larger foreign investments in India, the Special Economic Zones (SEZs) Policy was announced in April 2000.

79. (e); The main objectives of the SEZ Act are-
(a) Generation of additional economic activity
(b) Promotion of exports of goods and services;
(c) Promotion of investment from domestic and foreign sources;
(d) Creation of employment opportunities;
(e) Development of infrastructure facilities

80. (a); With effect from 31 March 2005, a sub-standard asset would be one, which has remained NPA for a period less than or equal to 12 months. In such cases, the current net worth of the borrower/guarantor or the current market value of the security charged is not enough to ensure recovery of the dues to the banks in full.

81. (c); With effect from March 31, 2005, an asset would be classified as doubtful if it has remained in the sub-standard category for a period of 12 months. A loan classified as doubtful has all the weaknesses inherent in assets that were classified as sub-standard, with the added characteristic that the weaknesses make collection or liquidation in full,– on the basis of currently known facts, conditions and values – highly questionable and improbable.

82. (b); Under the aegis of Pradhan Mantri MUDRA Yojana (PMMY), MUDRA has already created its initial products/schemes. The interventions have been named 'Shishu', 'Kishor' and 'Tarun' to signify the stage of growth/development and funding needs of the beneficiary micro unit / entrepreneur and also to provide a reference point for the next phase of graduation / growth to look forward to. The financial limit for these schemes is:-
(a) Shishu:- covering loans up to 50,000/-
(b) Kishor:- covering loans above 50,000/- and up to 5 lakh
(c) Tarun:- covering loans above 5 lakh to 10 lakh

83. (e); Under the aegis of Pradhan Mantri MUDRA Yojana (PMMY), MUDRA has already created its initial products/schemes. The interventions have been named 'Shishu', 'Kishor' and 'Tarun' to signify the stage of growth/development and funding needs of the beneficiary micro unit / entrepreneur and also to provide a reference point for the next phase of graduation / growth to look forward to. The financial limit for these schemes is:-
(a) Shishu:- covering loans up to 50,000/-
(b) Kishor:- covering loans above 50,000/- and up to 5 lakh
(c) Tarun:- covering loans above 5 lakh to 10 lakh

84. (b); The incentives and facilities offered to the units in SEZs for attracting investments into the SEZs, including foreign investment include:-
(a) Duty free import/domestic procurement of goods for development, operation and maintenance of SEZ units
(b) 100% Income Tax exemption on export income for SEZ units under Section 10AA of the Income Tax Act for first 5 years, 50% for next 5 years thereafter and 50% of the ploughed back export profit for next 5 years.

(c) Exemption from minimum alternate tax under section 115JB of the Income Tax Act.
(d) External commercial borrowing by SEZ units up to US $ 500 million in a year without any maturity restriction through recognized banking channels.
(e) Exemption from Central Sales Tax.
(f) Exemption from Service Tax.
(g) Single window clearance for Central and State level approvals.
(h) Exemption from State sales tax and other levies as extended by the respective State Governments.

85. (a); Special Economic Zones (SEZs) is a specifically delineated duty-free enclave and shall be deemed to be foreign territory for the purposes of trade operations and duties and tariffs.

86. (e); Narasimham Committee Report I (1991) recommended the setting up of Special Tribunals to reduce the time required for settling cases. Accepting the recommendations, Debt Recovery Tribunals (DRTs) were established.

87. (a); DRTs stands for Debt Recovery Tribunals.

88. (e); Under the aegis of Pradhan Mantri MUDRA Yojana (PMMY), MUDRA has already created its initial products/schemes. The interventions have been named 'Shishu', 'Kishor' and 'Tarun' to signify the stage of growth/development and funding needs of the beneficiary micro unit / entrepreneur and also to provide a reference point for the next phase of graduation / growth to look forward to. The financial limit for these schemes is:-
(a) Shishu:- covering loans up to 50,000/-
(b) Kishor:- covering loans above 50,000/- and up to 5 lakh
(c) Tarun:- covering loans above 5 lakh to 10 lakh

89. (d); Private sector, Public sector and State government can set up Special Economic Zones (SEZs).

90. (b); Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest Act 2002 is popularly known as Securitization Act. This act enables the banks to issue notices to defaulters who have to pay the debts within 60 days. Once the notice is issued the borrower cannot sell or dispose the assets without the consent of the lender. The Securitization Act further empowers the banks to take over the possession of the assets and management of the company. The lenders can recover the dues by selling the assets or changing the management of the firm. The Act also enables the establishment of Asset Reconstruction Companies for acquiring NPA.

91. (a); Monetary policy refers to the policy of the central bank with regard to the use of monetary instruments under its control to achieve the goals specified in the Act. The Reserve Bank of India (RBI) is vested with the responsibility of conducting monetary policy. This responsibility is explicitly mandated under the Reserve Bank of India Act, 1934.

92. (d); The primary objective of monetary policy is to maintain price stability while keeping in mind the objective of growth. Price stability is a necessary precondition to sustainable growth. In May 2016, the Reserve Bank of India (RBI) Act, 1934 was amended to provide a statutory basis for the implementation of the flexible inflation targeting framework.

93. (e); The Banking Ombudsman Scheme enables an expeditious and inexpensive forum to bank customers for resolution of complaints relating to certain services rendered by banks. The Banking Ombudsman Scheme is introduced under Section 35 A of the Banking Regulation Act, 1949 by RBI with effect from 1995.

94. (b); The SDR was created by the IMF in 1969 as a supplementary international reserve asset, in the context of the Bretton Woods fixed exchange rate system.

95. (d); Indian Banks' Association (IBA) set up in 1946 with 22 members to discuss issues of common interests. Over the years, IBA emerged as the Voice of Indian Banking Industry.

96. (b); Indian Banks' Association (IBA) set up in 1946 with 22 members to discuss issues of common interests. Over the years, IBA emerged as the Voice of Indian Banking Industry.

97. (b); present Repo Rate is 5.15 %.

98. (e); Cash Reserve Ratio is Reserve ratio of RBI.

99. (d); The Banking Ombudsman is a senior official appointed by the Reserve Bank of India to redress customer complaints against deficiency in certain banking services.

100. (e); As on January 2020, there are 22 Banking Ombudsman centre located in India. This are-
1. Ahmedabad, Gujarat
2. Bengaluru, Karnataka
3. Bhopal, Madhya Pradesh
4. Bhubaneswar, Odisha
5. Chandigarh
6. Chennai, Tamil Nadu
7. Guwahati, Assam
8. Hyderabad, Andhra Pradesh
9. Jaipur, Rajasthan
10. Kanpur, Uttar Pradesh
11. Kolkata, West Bengal
12. Mumbai (I), Maharashtra
13. Mumbai (II), Maharashtra
14. New Delhi (I)
15. New Delhi (II)
16. Patna, Bihar
17. Thiruvananthapuram, Kerala
18. Dehradun, Uttarakhand
19. Ranchi, Jharkhand
20. Jammu, Jammu and Kashmir
21. Raipur, Chhattisgarh
22. New Delhi (III)

101. (c); The International Bank for Reconstruction and Development (IBRD) is an international financial institution that offers loans to middle-income developing countries.

102. (d); The Comptoir d'Escompte de Paris opened a branch in Calcutta in 1860, and another in Bombay in 1862; branches followed in Madras and Pondicherry. HSBC established itself in Bengal in 1869.

103. (d); The promoters of Small Finance Banks should have 10 years experience in banking and finance.

104. (a); After making Legal Entity Identifier (LEI) mandatory for transactions in interest rate, forex and credit derivative market, the Reserve Bank of India (RBI) is set to make LEI compulsory for companies having aggregate fund-based and non-fund based exposure over Rs 5 crore.

105. (d); Stock Holding Corporation of India Ltd (SHCIL), India's largest custodian and depository participant.

106. (a); The capital adequacy ratio (CAR) is a measurement of a bank's available capital expressed as a percentage of a bank's risk-weighted credit exposures.

107. (a); HDFC Bank, India's second-largest private sector lender has launched a 10-second paperless instant loan Scheme for its existing customers. The 10-second loan Scheme was launched as part of HDFC Bank's digital banking platform GoDigital. With this, HDFC bank became first banking institution to completely automate the entire process of loan approval and disbursement.

108. (e); Present Marginal Standing Facility (MSF) rate is 5.40 percent.

109. (b); A deposit of money that can be withdrawn without prior notice is known as Demand Deposits, Ex:- in a current account.

110. (a); Anything tangible or intangible that can be owned or controlled to produce value and that is held to have positive economic value is considered an asset.

111. (c); Fino Payments Bank has launched its mobile banking app called BPay. Fino aims to make banking easy for millions of underbanked people in India. The upgraded BPay app is available on Android at present

112. (a); The Headoffice of European Bank for Reconstruction & Development (EBRD) is in London, UK.

113. (d); The Ministry of Finance increased the maximum age of joining the National Pension System (NPS) from the existing 60 years to 65 years under NPS - Private Sector (i.e. all citizen and corporate model)

114. (e); IIFCL is a wholly-owned Government of India company set up in 2006 to provide long-term finance to viable infrastructure projects through the Scheme for Financing Viable Infrastructure Projects through a Special Purpose Vehicle called India Infrastructure Finance Company Ltd (IIFCL), broadly referred to as SIFTI.

115. (b); Amounts up to INR 50,000/- may be paid in cash to a beneficiary in India under MTSS.

116. (b); A local cheque is issued by a bank in the same city as the payee.

117. (c); Commercial Paper (CP) can be issued for maturities between a minimum of 7 days and a maximum of up to one year from the date of issue.

118. (c); The PCA framework is applicable only to commercial banks and not extended to co-operative banks, non-banking financial companies (NBFCs) and FMIs.

119. (d); Head office of IndusInd Bank is in Mumbai

120. (d); DEMAT or De-materialized Account refers to a deposit made at an Indian financial institution that can be used for investing in shares of stocks and other financial assets. Securities are held electronically in a DEMAT Account, thereby eliminating the need for physical paper certificates

121. (e); KVP certificates are available in the denominations of Rs 1000, Rs 5000, Rs 10000 and Rs 50000. The minimum amount that can be invested is Rs 1000. However, there is no upper limit on the purchase of KVPs.

122. (b); The UIDAI or Unique Identification Authority of India has launched a new mobile app, called mAadhaar, that will negate the need to carry the Aadhaar card in wallets.

123. (e); The Index of Industrial Production (IIP) is an index for India which details out the growth of various sectors in an economy such as mineral mining, electricity and manufacturing. The all India IIP is a composite indicator that measures the short-term changes in the volume of production of a basket of industrial products during a given period with respect to that in a chosen base period. It is compiled and published monthly by the Central Statistical Organisation (CSO)

124. (d); Marginal Standing Facility (MSF) is a facility under which scheduled commercial banks can borrow additional amount of overnight money from the Reserve Bank by dipping into their Statutory Liquidity Ratio (SLR).

125. (d); The State Bank of India has introduced a loyalty program for its valued customers. This program is called as State Bank Rewardz, the program gives the customers several opportunities to earn reward points and earn many times faster at Max Get More partner outlets.

126. (a); The Postal Service Board, the apex management body of the Department of Posts, comprises the Chairman and six Members.

127. (e); Reverse Repo Rate- 4.90 percent, presently

128. (b); A recession is when the economy declines significantly for at least six months. That means there's a drop in the following five economic indicators: real GDP, income, employment, manufacturing and retail sales. People often say a recession is when the GDP growth rate is negative for two consecutive quarters or more.

129. (d);

130. (a); Taxpayers who are earning between Rs.50 lacs to Rs.1 crore have to pay an additional surcharge of 10% on their total income which was not the case earlier. However, there has been no change in the surcharge which is additionally levied at 15% whose income is above Rs.1 crore.

131. (a); In the financial or banking world, a consortium refers to several lending institutions that group together to jointly finance a single borrower.

132. (c); World Business Council for Sustainable Development (WBCSD) headquarters in Geneva, Switzerland. WBCSD CEO and President is Peter Bakker.

133. (d); The tenure of an Fixed Deposit or Term Deposit can vary from 7, 15 or 45 days to 1.5 years and can be as high as 10 years.

134. (d); The Special Drawing Right (SDR) is an international reserve asset, created by the IMF in 1969 to supplement the existing official reserves of member countries.

135. (d); Ujjivan Small Finance Bank Limited Ujjivan Small Finance Bank Limited is a bank licensed under Section 22 of the Banking Regulation Act, 1949 to carry out small finance bank business in India.

136. (b); Budgetary deficit is the difference between all receipts and expenses in both revenue and capital account of the government. If revenue expenses of the government exceed revenue receipts, it results in revenue account deficit. Similarly, if the capital disbursements of the government exceed capital receipts, it leads to capital account deficit.
Budgetary deficit is usually expressed as a percentage of GDP.

137. (b); NBFCs are incorporated under the Companies Act, 1956.

138. (d); Society for Worldwide Interbank Financial Telecommunication (SWIFT) Code is a standard format of Bank Identifier Codes(BIC) for banks to identify banks and financial institutions globally.

139. (d); Call money market is a market for uncollateralized lending and borrowing of funds. This market is predominantly overnight and is open for participation only to scheduled commercial banks and the primary dealers.

140. (c); The government launched the 'Bharat 22' exchange traded fund (ETF) managed by ICICI Prudential Mutual Fund, targeting an initial amount of about Rs8,000 crore

141. (d); The Board of experts named the Board for Industrial and Financial Reconstruction (BIFR) was set up in January 1987 and functional with effect from 15th May 1987. The Appellate Authority for Industrial and Financial Reconstruction (AAIRFR) was constituted in April 1987. Government companies were brought under the purview of SICA in 1991 when extensive changes were made in the Act including, inter-alia, changes in the criteria for determining industrial sickness.

142. (b); ICICI Bank is the first Universal Bank in India.

143. (a); An agreement on Trade-Related Investment Measures which specifies the rules that are applicable to the domestic regulations a country applies to foreign investors. The agreement is applicable to all members of the World Trade Organisation (WTO).

144. (c); Treasury bills (T-bills) offer short-term investment opportunities, generally up to one year. They are thus useful in managing short-term liquidity. At present, the Government of India issues three types of treasury bills through auctions, namely, 91-day, 182-day and 364-day. There are no treasury bills issued by State Governments.

145. (d); Multi Commodity Exchange of India Ltd (MCX) is an independent commodity exchange based in India. It was established in 2003 and is based in Mumbai.

146. (d); A credit rating agency (CRA, also called a ratings service) is a company that assigns credit ratings, which rate a debtor's ability to pay back debt by making timely interest payments and the likelihood of default. Example:- ICRA, CRISIL, and Standard and Poor's (S&P).

147. (d); Drawee is a legal and banking term used to describe the party that has been directed by the depositor to pay a certain sum of money to the person presenting the check or draft. A typical example is if you are cashing a paycheck.

148. (b); Deutsche Bank AG is a German global banking and financial services company, with its headquarters in the Deutsche Bank Twin Towers in Frankfurt. Deutsche Bank was founded in Berlin in 1870 as a specialist bank for foreign trade.

149. (b); The Indian currency system was converted into decimal system by Indian Coinage (Amendment) Act 1955 which brought into force from April 01st 1957.

150. (d); ABN AMRO Bank N.V. is a Dutch bank with headquarters in Amsterdam. ABN AMRO Bank is the third-largest bank in the Netherlands. In 1991, Algemene Bank Nederland (ABN) and AMRO Bank (itself the result of a merger of the Amsterdamsche Bank and the Rotterdamsche Bank in the 1960s) agreed to merge to create the original ABN AMRO.

151. (d); National Payments Corporation of India (NPCI) is an umbrella organization for all retail payments system in India. It was set up with the guidance and support of the Reserve Bank of India (RBI) and Indian Banks' Association (IBA).

152. (a); NPCI was incorporated in December 2008 and the Certificate of Commencement of Business was issued in April 2009. It was incorporated as a Section 25 company under Companies Act 1956 (now Section 8 of Companies Act 2013) and is aimed to operate for the benefit of all the member banks and their customers.

153. (e); Established on 17 May 1930, the Bank for International Settlements (BIS) is the world's oldest international financial organization. The BIS has 60 member central banks, representing countries from around the world that together make up about 95% of world GDP.

154. (c); Basel, Switzerland is the head office of Bank for International Settlements (BIS).

155. (b); NPCI was incorporated as a Section 25 company under Companies Act 1956 (now Section 8 of Companies Act 2013) and is aimed to operate for the benefit of all the member banks and their customers.

156. (c); Sir Osborne Smith was the first Governor of the Reserve Bank. A professional banker, he served for over 20 years with the Bank of New South Wales and 10 years with the Commonwealth Bank of Australia before coming to India in 1926 as a Managing Governor of the Imperial Bank of India.

157. (c); The scheduled commercial banks are those banks which are included in the second schedule of RBI Ac 1934. Scheduled Commercial Banks are grouped under following categories:
1. State Bank of India
2. Nationalised Banks
3. Foreign Banks
4. Regional Rural Banks
5. Other Scheduled Commercial Banks

158. (d); Axis Bank Ltd is the third largest of the private-sector banks in India and it is not merged with SBI in April 2017.

159. (d); Founded in 1943, UCO Bank is a commercial bank and a Government of India Undertaking.

160. (a); ING Vysya Bank has successfully merged with Kotak Bank with effect from April 1, 2015, and will bear the name Kotak Mahindra Bank.

161. (c); For providing postal services, the whole country has been divided into 23 postal circles. Each Circle is co-terminus? with a State except for Gujarat Circle (which also administers the Union Territories of Daman & Diu and Dadra & Nagar Haveli), Kerala Circle (which includes the Union Territory of Lakshadweep)?, Maharashtra Circle (which has within its jurisdiction the State of Goa), North East Circle (which comprises six North Eastern States - Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland & Tripura), Punjab Circle (which has within its administrative jurisdiction, the Union Territory of Chandigarh), and Tamil Nadu Circle (which also administers the Union Territory of Pondicherry). Each of these Circles is headed by a Pr. Chief Postmaster General or Chief Postmaster General. Each Circle is further divided into Regions comprising field units, called Divisions (Postal / RMS Divisions). Each Region is headed by a Postmaster General. In the Circles and Regions there are other functional units like Circle Stamp Depots, Postal Stores Depots and Mail Motor Service etc. Besides these 23 Circles, there is another Circle, called Base Circle, to cater to the postal communication needs of the Armed Forces. The Base Circle is headed by an Additional Director General, Army Postal Service in the rank of a Major General. The officer cadre of the Army Postal Service comprises officers on deputation from the Civil Posts. Seventy five percent of the other ranks of the Army Postal Service are also drawn from the Department of Posts and the remaining personnel are recruited by the Army.

162. (c); The Reserve Bank of India (RBI) has gave in-principle approvals to infrastructure financier IDFC Ltd and microlender Bandhan Financial Services Pvt. Ltd to start new banks in 2014.

163. (c); Shaktikanta Das is an Indian retired 1980 batch Indian Administrative Service officer of Tamil Nadu cadre. Currently serving as the 25th governor of the Reserve Bank of India,

164. (d); HSBC bank first introduced Automated Teller Machine (ATM) in India (1987).

165. (a); Bank of Rajasthan was merged with ICICI Bank in 2010.

166. (d); PSLCs stands for Priority Sector Lending Certificates.

167. (a); The Banking Ombudsman Scheme enables an expeditious and inexpensive forum to bank customers for resolution of complaints relating to certain services rendered by banks. The Banking Ombudsman Scheme is introduced under Section 35 A of the Banking Regulation Act, 1949 by RBI with effect from 1995.

168. (e); Money Transfer Service Scheme (MTSS) are the most common arrangements under which the remittances are received into the country.

169. (d); International Financial System (IFS) is software developed by UPU to coordinate international remittance services among the partner countries. At present the service is operational with La Poste Group, France and UAE.

170. (c); RDA stands for Rupee Drawing Arrangement.

171. (e); NABARD came into existence on 12 July 1982 by transferring the agricultural credit functions of RBI and refinance functions of the then Agricultural Refinance and Development Corporation (ARDC). It was dedicated to the service of the nation by the late Prime Minister Smt. Indira Gandhi on 05 November 1982.

172. (b); The mission of NABARD is Promote sustainable and equitable agriculture and rural prosperity through effective credit support, related services, institution development and other innovative initiatives. NABARD stands for National Bank for Agriculture and Rural Development.

173. (a); Securities Appellate Tribunal (SAT) is a statutory body established under the provisions of Section 15K of the Securities and Exchange Board of India Act, 1992 to hear and dispose of appeals against orders passed by the Securities and Exchange Board of India or by an adjudicating officer under the Act and to exercise jurisdiction, powers and authority conferred on the Tribunal by or under this Act or any other law for the time being in force.

174. (b); The Securities and Exchange Board of India (SEBI) was established on April 12, 1992 in accordance with the provisions of the Securities and Exchange Board of India Act, 1992.

175. (d); NABARD was set up with an initial capital of Rs.100 crore, its' paid up capital stood at Rs. 5,000 crore as on 31st March 2016.

176. (a); Only ICICI Bank are authorized to handle the Senior Citizens Savings Scheme (SCSS), 2004.

177. (c); The Government of India has enacted the Micro, Small and Medium Enterprises Development (MSMED) Act, 2006 in terms of which the definition of micro, small and medium enterprises. As under a micro enterprise is an enterprise where investment in plant and machinery does not exceed Rs 25 lakhs.

178. (b); Commercial Paper (CP) is an unsecured money market instrument issued in the form of a promissory note. It was introduced in India in 1990.

179. (e); RBI has maintained the Principal Accounts of Central as well as State Governments at its Central Accounts Section.

180. (d); Corporate, primary dealers (PDs) and the All-India Financial Institutions (FIs) are eligible to issue Commercial Paper (CP).

181. (e); Under On-line Tax Accounting System (OLTAS), only a Single Copy Challan is used with a tear off portion for the Tax Payer.

182. (d); Commercial Paper (CP) can be issued for maturities between a minimum of 7 days and a maximum of up to one year from the date of issue.

183. (d); All commercial banks including branches of foreign banks functioning in India, local area banks and regional rural banks are insured by the DICGC.

184. (c); Money Transfer Service Scheme is a quick and easy way of transferring personal remittances from abroad to beneficiaries in India. Only inward personal remittances into India such as remittances towards family maintenance and remittances favoring foreign tourists visiting India are permissible. No outward remittance from India is permissible under MTSS.

185. (a); Each depositor in a bank is insured upto a maximum of Rs.1,00,000 (Rupees One Lakh) for both principal and interest amount held by him in the same capacity and same right as on the date of liquidation/cancellation of bank's licence or the date on which the scheme of amalgamation/merger/reconstruction comes into force.

186. (b); The government of India holds 100% stake in NABARD.

187. (a); Ajay Tyagi is the present Chairman of SEBI.

188. (c); The importance of institutional credit in boosting rural economy has been clear to the Government of India right from its early stages of planning. Therefore, the Reserve Bank of India (RBI) at the insistence of the Government of India, constituted a Committee to Review the Arrangements For Institutional Credit for Agriculture and Rural Development (CRAFICARD) to look into these very critical aspects. The Committee was formed on 30 March 1979, under the Chairmanship of Shri B. Sivaraman, former member of Planning Commission, Government of India.

189. (a); In RRBs, 50% share shall be held by the central government, 15% by the concerned state government and 35% by the sponsor bank.

190. (b); Regional Rural Banks were set up by the Government of India under Regional Rural Banks act 1976.

191. (d); Established in 1927, Federation of Indian Chambers of Commerce and Industry (FICCI) is the largest and oldest apex business organisation in India. Its history is closely interwoven with India's struggle for independence, its industrialization, and its emergence as one of the most rapidly growing global economies.

192. (c); Established by the Government of India, we commenced operations in 1982 under the Export-Import Bank of India Act, 1981 as a purveyor of export credit, mirroring global Export Credit Agencies. R.C. Shah was the first Chairman and Managing Director (CMD) from 1982 - 1985 of Exim Bank.

193. (e); ECGC Ltd. (Formerly Export Credit Guarantee Corporation of India Ltd.), wholly owned by Government of India, was set up in 1957 with the objective of promoting exports from the country by providing Credit Risk Insurance and related services for exports.

194. (a); ECGC Ltd (Formerly Export Credit Guarantee Corporation of India Ltd.).

195. (b); The Asian Infrastructure Investment Bank (AIIB) is a new multilateral financial institution founded to bring countries together to address the daunting infrastructure needs across Asia.

196. (e); The World Bank Group consists of five organizations. These are:-

1. International Bank for Reconstruction and Development (IBRD)
2. International Development Association IDA)
3. International Finance Corporation (IFC)
4. Multilateral Investment Guarantee Agency (MIGA)
5. International Centre for Settlement of Investment Disputes (ICSID)

197. (a); The World Bank is like a cooperative, made up of 189 member countries. These member countries, or shareholders, are represented by a Board of Governors, who are the ultimate policymakers at the World Bank.

198. (e); International Development Association (IDA) is an agency to provide 'soft-loans' to developing countries.

199. (d); The New Development Bank has an initial subscribed capital of US$50 billion and an initial authorized capital of US$100 billion.

200. (b); The inaugural meeting of the Board of Governors of the NDB was chaired by Russia and held on the eve of the Ufa Summit on 7 July 2015, when the Bank formally came into existence as a legal entity.

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Static Awareness MCQ

1. Standard & Poor's (S&P) Global Ratings and its predecessor organisations have been in business for more than 150 years. (S&P) based in-
(a) New York, USA (b) London, UK
(c) Paris, France (d) Vienna, Austria
(e) Geneva, Switzerland

2. Pulitzer prize is awarded for outstanding work in the field of
(a) Science and Technology
(b) Environmental Studies
(c) Literature and Journalism
(d) International Understanding
(e) Economics

3. Who is current Chemicals and Fertilizers Minister in Narendra Modi government?
(a) Ananth kumar
(b) Kalraj Mishra
(c) Anant Geete
(d) Ravi Shankar Prasad
(e) Shri D.V. Sadananda Gowda

4. Bhitarkanika National Park in which state?
(a) Karnataka (b) Tamil Nadu
(c) Odisha (d) Bihar (e) Madhya Pradesh

5. The capital of Egypt is?
(a) Tbilisi (b) Cairo (c) Conakry
(d) Djibouti (e) Roseau

6. Who is the present governor of Rajasthan?
(a) MridulaSinha
(b) VP Singh Badnore (c) Shri Kalraj Mishra
(d) Krishan Kant Paul (e) Kaptan Singh Solanki

7. The author of the book "The Gin Drinkers" is
(a) Arundhati Roy (b) Anita Desai
(c) Sagarika Ghose (d) Shoba Dey
(e) Khushwant Singh

8. Lal Bahadur Shastri International Airport is a public airport located in-
(a) Varanasi, Uttar Pradesh
(b) Bhagalpur, Bihar
(c) Kolkata, West Bengal
(d) Indore, Madhya Pradesh
(e) Hyderabad, Telangana

9. Who is present President of Algeria?
(a) Ilham Aliyev (b) John Howard
(c) Abdelaziz Bouteflika (d) Freundel Stuart
(e) Serzh Sargsyan

10. Who is the governor of Sikkim?
(a) Keshari Nath Tripathi (b) Acharya Dev Vrat
(c) Shri Ganga Prasad (d) V.P. Singh Badnore
(e) Tathagata Roy

11. The book titled I do What I do : On Reform, Rhetoric & Resolve has been penned by
(a) C Rangarajan
(b) Subramanian Swamy
(c) Raghuram Rajan
(d) Arvind Subramanian
(e) Urjit Patel

12. The Lengteng Wildlife Sanctuary (LWS) is located in which state?
(a) Sikkim (b) Kerala (c) Manipur
(d) Mehalaya (e) Mizoram

13. Satpura National Park is located in the Hoshangabad district of which of the following state?
(a) Uttar Pradesh (b) Andhra Pradesh
(c) Himachal Pradesh (d) Arunachal Pradesh
(e) Madhya Pradesh

14. Girna Dam is in which of the following state?
(a) Madhya Pradesh (b) Tamil Nadu
(c) Kerala (d) Maharashtra
(e) Karnataka

15. World Hindi Day is observed on which day?
(a) 7th October (b) 25th March
(c) 10th January (d) 8th January
(e) 14th September

16. Saraswati Samman is given to which field?
(a) History (b) Science (c) Literature
(d) Social Harmony (e) Economics

17. Chandoli National Park is one of the popular parks in which of the following states?
(a) Madhya Pradesh (b) Uttar Pradesh
(c) Himachal Pradesh (d) Jammu & Kashmir
(e) Maharashtra

18. Near which city is the Kakrapar Nuclear Power Station located?
(a) Kota (Rajasthan)
(b) Karwar (Karnataka)
(c) Surat (Gujarat)
(d) Mumbai (Maharashtra)
(e) Kolkata (West Bengal)

19. Who is present governor of Goa?
(a) Ram Naik
(b) Shri Satya Pal Malik.
(c) Kalyan Singh
(d) C Vidyasagar Rao
(e) None of the above

20. Ottawa is the Capital of which of the following country?
(a) Netherlands (b) Australia (c) Austria
(d) Canada (e) Ireland

21. Saurashtra Cricket Association Stadium is a cricket stadium is located in which city
(a) Nagpur (b) Kanpur (c) Rajkot
(d) Dharamshala (e) None

22. Sri Ranganathaswamy Temple is situated in which state?
(a) Andhra Pradesh (b) Telangana
(c) Kerala (d) Tamil Nadu
(e) Karnataka

23. The Nandankanan Zoological Park (NZP) is a 400-hectare zoo and botanical garden in which state?
(a) Odisha (b) Kerala (c) Andhra Pradesh
(d) Haryana (e) None of these

24. Tallinn is capital city of which Country?
(a) Estonia (b) Ukraine (c) Canada
(d) Poland (e) Scotland

25. Name the newly appointed Governor of Bihar.
(a) Banwarilal Purohit (b) S C Jamir
(c) Shri Phagu Chauhan (d) Shri Lal Ji Tandon
(e) Ram Naik

26. The Nokrek National Park (NNS) is located in
(a) Assam (b) Odisha
(c)Madhya Pradesh (d) Uttarakhand
(e) Meghalaya

27. Fugdi is a folk dance is related to which state?
(a) Karnataka (b) Maharashtra
(c) Gujarat (d) Goa (e) Madhya Pradesh

28. Where is the head office of European Bank for Reconstruction & Development (EBRD)?
(a) London (b) Paris (c) Vienna
(d) Geneva (e) New York

29. What is the capital of Indonesia?
(a) Moscow (b) Baku (c) Jakarta
(d) Canberra (e) None of these

30. Which city is served by Lokpriya Gopinath Bordoloi International Airport?
(a) Ahmedabad (b) Kochi (c)Kozhikode
(d) Bengaluru (e) Guwahati

31. The Sun temple is situated in the small town of Konark, which is located at?
(a) Puri, Odisha
(b) Deoghar, Jharkhand
(c) Nainital, Uttrakhand
(d) Mathura, Uttar Pradesh
(e) Hyderabad, Telangana

32. Where is the headquarters of Amnesty International?
(a) London, UK (b) Paris, France
(c) New York, USA (d) Vienna, Austria
(e) Geneva, Switzerland

33. Satpura National Park is located in the Hoshangabad district of which of the following state?
(a) Uttar Pradesh (b) Andhra Pradesh
(c) Himachal Pradesh (d) Arunachal Pradesh
(e) Madhya Pradesh

34. Headquarter of Indian Space Research Organisation is in which of the following city?
(a) Mumbai (b) New Delhi
(c)Bangalore (d) Dehradun (e) Chennai

35. "Kumharia" a proposed nuclear power plant is related to which State?
(a) Andhra Pradesh (b) Gujarat
(c) Haryana (d) West Bengal
(e) Uttar Pradesh

36. NRLM is a poverty alleviation project implemented by Ministry of Rural Development, Government of India. NRLM stands for-?
(a) Nominal Rural Livelihood Mission
(b) National River Livelihood Mission
(c) National Rural Looking Mission
(d) National Rural Livelihood Mission
(e) National Rural Livelihood Management

37. The traditional Bonderam festival is celebrated in which state?
(a) Kerala (b) Tamil Nadu (c) Goa
(d) Maharashtra (e) None of these

38. Dudhawa Dam is located in Dhamtari district of Chhattisgarh. It is built across the _____ river in the village of Dudhawa?
(a) Kanhar (b) Shivnath (c) Indravati
(d) Mahanadi (e) Sabari

39. Parul Parmar is related to which sports?
(a) Weightlifting (b) Golf (c) Badminton
(d) Shooting (e) Boxing

40. Who is present Prime Minister of Italy?
(a) Luigi Di Maio (b) Giuseppe Conte
(c) Matteo Salvini (d) Sergio Mattarella
(e) Paolo Gentiloni

41. Jackson Singh Thounaojam is associated with which sports?
(a) Football (b) Hockey (c) Chess
(d) Table Tennis (e) Cricket

42. The famous Khajuraho Dance Festival was held in which state?
(a) Andhra Pradesh (b) Odisha
(c) Kerala (d) Madhya Pradesh
(e) Gujarat

43. Name the state, which hosted the first edition of its Hot Air Balloon Festival?
(a) Tamil Nadu (b) Odisha
(c) Maharashtra (d) Andhra Pradesh
(e) Uttar Pradesh

44. Where is the headquarters of International Maritime Organization (IMO)?
(a) New York (b) Berlin (c) UK
(d) Milan (e) London

45. The Rollapadu Wildlife Sanctuary (RWS) is located in which state/UT?
(a) Odisha (b) Manipur
(c) Himachal Pradesh (d) Andhra Pradesh
(e) Bihar

46. What is the Capital of Chile?
(a) Buenos Aires (b) Baku (c) Jakarta
(d) Santiago (e) Lima

47. The 2017 Konark Dance Festival has started in which state?
(a) Andhra Pradesh (b) Odisha
(c) Kerala (d) Karnataka
(e) Kerala

48. Who is the current Human Resource Development Minister in Narendra Modi government?
(a) Dr Harsh Vardhan
(b) Kalraj Mishra
(c) Jual Oram
(d) Shri Ramesh Pokhriyal 'Nishank'
(e) Thawar Chand Gehlot

49. Where is the Headquarters of International Weightlifting Federation (IWF)?
(a) Budapest, Hungary
(b) Nairobi, Kenya
(c) Madrid, Spain
(d) Bern, Switzerland
(e) Helsinki, Finland

50. The Darrah National Park (DNP) is located in which state/UT?
(a) Maharashtra (b) Odisha (c) Uttar Pradesh
(d) Punjab (e) Rajasthan

51. Where is the Indian Institute of Foreign Trade Located?
(a) New Delhi (b) Hyderabad
(c) Mumbai (d) Ahmedabad (e) Bangalore

52. Idamalayar (Edamalayar) Hydroelectric Power Project is of TYPE Hydro Power Plant with a design capacity of 75 MW located at?
(a) Karnataka (b) Himachal Pradesh
(c) Uttarakhand (d) Bihar
(e) Kerala

53. What is the full form of NATO?
(a) North African Treaty Organization
(b) North Atlantic Treaty Organization
(c) North Asian Treaty Organization
(d) North American Treaty Organization
(e) None of these

54. What is the Capital of Cuba?
(a) Suva (b) Luanda (c) Buenos Aires
(d) Havana (e) Yerevan

55. Nallamala hills is located in the state of-
(a) Orissa (b) Meghalaya
(c) Andhra Pradesh (d) Gujarat
(e) Maharashtra

56. Father of Green Revolution in India is?
(a) Lal Bahadur Shastri (b) APJ Abdul Kalam
(c) Verghese Kurien (d) Jawaharlal Nehru
(e) MS Swaminathan

57. Anjali Bhagwat is a professional Indian?
(a) Cricketer (b) Footballer (c) Shooter
(d) Wrestler (e) None of the above

58. The headquarters of UNESCO is in
(a) New York (b) The Hague (c) Paris
(d) Moscow (e) Geneva

59. In which among the following year Asia's first Export Processing Zone (EPZ) was set up?
(a) 1959 (b) 1971 (c) 1965
(d) 1956 (e) 1975

60. Who is the current and ninth Secretary-General of the United Nations?
(a) Tedros Adhanom Ghebreyesus
(b) Irina Bokova
(c) Ban Ki-Moon
(d) Antonio Guterres
(e) Roberto Azevedo

61. India's Sivalingam Sathish Kumar and Ragala Venkat Rahul is related to which sports?
(a) Boxing (b) Swimming
(c) Badminton (d) Weightlifting
(e) Wrestling

62. The Group of 7 (G7) is a group consisting of 7 countries, with the 7 largest advanced economies in the world, represent more than 62% of the global net wealth. G7 summit 2019 was held in-
(a) France (b) Japan (c) USA
(d) Italy (e) Canada

63. SWIFT provides a network that enables financial institutions worldwide to send and receive information about financial transactions in a secure, standardized and reliable environment. What is the meaning of "S" in SWIFT?
(a) Society (b) Service (c) System
(d) Solution (e) Sending

64. The SEAC's function on the principle of collective responsibility. What is the meaning of "A" in SEAC?
(a) Agriculture (b) Appraisal (c) Apeared
(d) Authority (e) Approval

65. Panna National Park is a national park located in-
(a) Maharashtra (b) Gujarat (c)Madhya Pradesh
(d) Rajasthan (e) Tamil Nadu

66. The City Union Bank Limited is an Indian bank. Where is the headquaters of City Union Bank?
(a) Uttar Pradesh (b) West Bengal(c) Kerala
(d) Tamil Nadu (e) Maharashtra

67. Cheruthoni Dam, the largest concrete gravity dam in which state?
(a) Andhra Pradesh (b) Karnataka
(c) Tamil Nadu (d) Kerala
(e) None of these

68. 12th November is celebrated as-
(a) International Day of Peace
(b) World Animal Day
(c) World Coffee Day
(d) National Food Day
(e) World Pneumonia Day

69. Nobel Prize are distributed annually at
(a) Manila (b) Stockholm (c) Geneva
(d) New York (e) None of these

70. Name the author of the book "Mind Master: Winning Lessons from a Champion's Life "?
(a) Shaktikanta Das
(b) Hasmukh Adhia
(c) Viswanathan Anand
(d) Arvind Subramanian
(e) Ratan P Watal

71. The Government of India has launched the AMRUT with the aim of providing basic civic amenities. What is the meaning of "U" in AMRUT?
(a) Useful (b) Universal (c) Unique
(d) Urban (e) Uniform

72. Who is the first sports player to be recipient of Bharat Ratna Award?
(a) P.T usha (b) Milkha singh
(c) Sachin Tendulkar (d) Dhyan Chand
(e) None of these

73. Where is the Headquarters of International Weightlifting Federation (IWF)?
(a) Budapest, Hungary
(b) Nairobi, Kenya
(c) Madrid, Spain
(d) Bern, Switzerland
(e) Helsinki, Finland

74. In which of the following state, the Achanakmar Wildlife Sanctuary situated?
(a) Rajasthan (b) Kerala (c) West Bengal
(d) Chhattisgarh (e) Odisha

75. Balphakram National Park is home to wide species of plants and animals and is located in the midst of the Garo Hills in-
(a) Meghalaya (b) Mizoram
(c) Arunachal Pradesh (d) Manipur
(e) Tripura

76. Vienna is the capital and largest city of-
(a) Canada (b) Australia (c) Yemen
(d) Russia (e) Austria

77. The Ukai Dam is the largest reservoir in which state?
(a) Rajasthan (b) Maharashtra
(c) Gujarat (d) Punjab (e) Kerala

78. Who is a leading Indian economist and Vice Chairman of NITI Aayog?
(a) Narendra Modi (b) Rajiv Kumar
(c) Bibek Debroy (d) Ramesh Chand
(e) VK Saraswat

79. Dhirubhai Ambani Solar Park is a 40-megawatt (MW AC) photovoltaic power station in-
(a) Rajasthan (b) Gujarat (c) Maharashtra
(d) Kerala (e) West Bengal

80. Sanjeev Stalin is related to which game?
(a) Cricket (b) Football (c) Tennis
(d) Archery (e) Wrestling

81. Where does JRD Tata Sports Complex Stadium?
(a) Lucknow (b) Ranchi (c) Kolkata
(d) Patna (e) Jamshedpur

82. Where is the headquarter of ICAN?
(a) Vienna, Austria
(b) Nairobi, Kenya
(c) Geneva, Switzerland
(d) New York, USA
(e) Washington DC, USA

83. Indira sagar dam is located in which state?
(a) Maharashtra (b) Haryana
(c) Odisha (d) Madhya Pradesh
(e) None of these

84. Krishnarajasagar dam built across Kaveri River in which state?
(a) Kerala (b) Odisha (c) Karnataka
(d) Telangana (e) None of these

85. Mettur Dam built across Kaveri River at Salem district in which state?
(a) Tamil Nadu (b) Madhya Pradesh
(c) Odisha (d) West Bengal
(e) Assam

86. The greatest dam Bisalpur, located in Tonk District of which state?
(a) Rajasthan (b) Uttar Pradesh
(c) Tamil Nadu (d) Gujarat
(e) Haryana

87. Koyna Dam is built across river koyana in which state?
(a) Maharashtra (b) Haryana
(c) Odisha
(d) Madhya Pradesh (e) None of these

88. Maithon Dam is built on the river of Barakar located in which state?
(a) West Bengal (b) Odisha (c) Uttar Pradesh
(d) Bihar (e) Jharkhand

89. The Rihand dam has been built across Rihand River a tributary of Sone river in which state?
(a) Bihar (b) Uttar Pradesh
(c) Jharkhand (d) West Bengal
(e) Odisha

90. Tunga Bhadra dam is constructed across river Tungabhadra in which state?
(a) Tamil Nadu (b) Kerala (c) Karnataka
(d) Telangana (e) Odisha

91. The Bhavani Sagar Dam constructed across Bhavani river in which state?
(a) Rajasthan (b) Uttar Pradesh
(c) Tamil Nadu (d) Gujarat
(e) Kerala

92. Prime Minister Narendra Modi has inaugurated various irrigation and water-related initiatives at Aji Dam. This dam is located in _____.
(a) Uttar Pradesh (b) Bihar (c) Gujarat
(d) Karnataka (e) Kerala

93. Prime Minister Narendra Modi has recently launched the world's second biggest dam on the river Narmada in Gujarat. This dam has been named as _____.
(a) Mansarovar Dam
(b) Rihand Dam
(c) Sardar Sarovar Dam
(d) Kol Dam
(e) Kishau Dam

94. Vindhyachal Thermal Power Station in the Singrauli district of which state?
(a) Jammu Kashmir (b) Odisha
(c) Haryana (d) Madhya Pradesh
(e) None of these

95. Mundra Thermal Power Station is situated in which state?
(a) Gujarat (b) Rajasthan
(c) Kerala (d) Andhra Pradesh
(e) Karnataka

96. Mundra Ultra Mega Power Plant is located in which state?
(a) Maharashtra (b) Gujarat (c) Goa
(d) Kerala (e) Manipur

97. Talcher Super Thermal Power Station or NTPC Talcher Kaniha is located in which state?
(a) Gujarat (b) Madhya Pradesh
(c) Andhra Pradesh (d) Haryana
(e) Odisha

98. Sipat Super Thermal Power Plant located at Sipat in which state?
(a) Uttarakhand (b) Chhattisgarh
(c) Himachal Pradesh (d) Arunachal Pradesh
(e) Assam

99. NTPC Dadri or National Capital Power Station (NCPS) owned and operated by NTPC is located in
(a) Madhya Pradesh (b) West Bengal
(c) Uttar Pradesh (d) Haryana
(e) None of these

100. NTPC's Ramagundam thermal power plant is located in which state?
(a) Uttar Pradesh (b) Madhya Pradesh
(c) Odisha (d) Telangana
(e) None of these

101. Korba Super Thermal Power Plant located in which state?
(a) Uttarakhand (b) Chhattisgarh
(c) Himachal Pradesh (d) Arunachal Pradesh
(e) Assam

102. Rihand Thermal Power Station at Rihandnagar is located in which state?
(a) Uttar Pradesh (b) Madhya Pradesh
(c) Odisha (d) Andhra Pradesh
(e) None of these

103. Jharsuguda Thermal Power Plant is located in which state?
(a) Uttar Pradesh (b) Madhya Pradesh
(c) Odisha (d) Andhra Pradesh
(e) None of these

104. Power Finance Corporation Ltd (PFC) has sanctioned a term loan of Rs 4,009 crore to the _____.
(a) Maharashtra Power Generation Corporation Lt
(b) Gujarat Power Generation Corporation Lt
(c) Karnataka Power Generation Corporation Lt
(d) BiharPower Generation Corporation Lt
(e) Telangana Power Generation Corporation Lt

105. In which district first phase of 65 MW Kashang Hydel Project has launched in Himachal Pradesh?
(a) Hamirpur (b) Sirmaur (c) Kullu
(d) Kinnaur (e) Bilaspur

106. Mudumalai National Park is situated at the crossroads of which three state?
(a) Tamil Nadu, Kerala and Karnataka
(b) Andhra Pradesh, Telangana and Tamil Nadu
(c) Kerala, Tamil Nadu and Andhra Pradesh
(d) Odisha, Telangana and Karnataka
(e) None of these

107. Periyar National Park is located in which state?
(a) Kerala (b) Tamil Nadu
(c) Andhra Pradesh (d) Telangana
(e) None of these

108. Dachigam National Park is situated in which state?
(a) Jammu and Kashmir (b) Gujarat
(c) Rajasthan (d) Uttar Pradesh
(e) None of these

109. Mundanthurai Wildlife Sanctuary is located in which state?
(a) Kerala (b) Tamil Nadu
(c) Andhra Pradesh (d) Telangana
(e) None of these

110. Anamalai Wildlife Sanctuary is one of the most beautiful wildlife sanctuary located in which state?
(a) Kerala (b) Tamil Nadu
(c) Andhra Pradesh (d) Telangana
(e) Karnataka

111. Bandipur National Park is located in the state of
(a) Kerala (b) Tamil Nadu
(c) Andhra Pradesh (d) Telangana
(e) Karnataka

112. Kudremukh National Park is located in which state?
(a) Karnataka (b) Tamil Nadu
(c) Andhra Pradesh (d) Telangana
(e) Kerala

113. Eravikulam National Park is located in which state?
(a) Karnataka (b) Tamil Nadu
(c) Andhra Pradesh (d) Telangana
(e) Kerala

114. The Chinnar Wildlife Sanctuary is located in which state?
(a) Kerala (b) Tamil Nadu (c) Rajasthan
(d) Assam (e) Manipur

115. Corbett National Park is situated in which state?
(a) Uttarakhand
(b) Jammu and Kashmir
(c) New Delhi
(d) Haryana
(e) Uttar Pradesh

116. Nanda Devi National Park is located in which state?
(a) Uttarakhand
(b) Jammu and Kashmir
(c) New Delhi
(d) Haryana
(e) Uttar Pradesh

117. The Hemis National Park is located in which state/UT?
(a) Uttarakhand (b) Ladakh
(c) New Delhi (d) Haryana (e) Uttar Pradesh

118. Valley of flowers is paradise on earth and is situated in?
(a) Uttarakhand (b) Jammu and Kashmir
(c) New Delhi (d) Haryana
(e) Uttar Pradesh

119. Ranthambore National Park is located in
(a) Kerala (b) Tamil Nadu (c) Rajasthan
(d) Assam (e) Manipur

120. Keoladeo Ghana National Park is located in which state?
(a) Kerala (b) Tamil Nadu (c) Rajasthan
(d) Assam (e) Manipur

121. Gir National Park and Sasan Gir Sanctuary is situated in
(a) Jammu and Kashmir
(b) Gujarat
(c) Rajasthan
(d) Uttar Pradesh
(e) Punjab

122. Sariska National Park is located in which state?
(a) Jammu and Kashmir
(b) Gujarat
(c) Rajasthan
(d) Uttar Pradesh
(e) Punjab

123. Kanha National Park is located in
(a) New Delhi (b) Uttar Pradesh
(c) Haryana (d) Madhya Pradesh
(e) None of these

124. The Dudhwa National Park is located in which state?
(a) New Delhi (b) Uttar Pradesh
(c) Haryana (d) Madhya Pradesh
(e) None of these

125. Pench National Park is located in which state?
(a) New Delhi (b) Uttar Pradesh
(c) Punjab (d) Madhya Pradesh
(e) Bihar

126. Kaziranga National Park is situated in which state?
(a) Kerala (b) Tamil Nadu (c) Rajasthan
(d) Assam (e) Manipur

127. Sunderban wildlife sanctuary is situated in which state?
(a) West Bengal (b) Assam (c) Odisha
(d) Jharkhand (e) Bihar

128. Manas National Park or Manas Wildlife Sanctuary is located in which state?
(a) West Bengal (b) Assam (c) Odisha
(d) Jharkhand (e) Bihar

129. Kanchendzonga National Park is located in which state?
(a) Himachal Pradesh (b) Arunachal Pradesh
(c) Sikkim (d) Assam
(e) Jammu and Kashmir

130. Where is the headquarter of DBS Bank?
(a) Singapore (b) Canada (c) Switzerland
(d) Japan (e) South Africa

131. Where is the headquarter of AB Bank Ltd?
(a) China (b) Russia (c) Singapore
(d) Bangladesh (e) Sri Lanka

132. Where is the headquarter of ABN AMRO Bank?
(a) Taiwan (b) Germany (c) France
(d) Netherland (e) None of these

133. Where is the headquarter of Bank of Nova Scotia?
(a) Singapore (b) Canada (c) Switzerland
(d) Japan (e) South Africa

134. Where is the headquarter of Barclay's Bank?
(a) USA (b) China (c) UK
(d) Russia (e) Germany

135. Where is the headquarter of BNP Paribas Bank?
(a) Taiwan (b) Germany (c) France
(d) Netherland (e) None of these

136. Where is the headquarter of Citibank?
(a) London (b) New York (c) Paris
(d) Geneva (e) Washington

137. Where is the headquarter of United Overseas Bank Ltd?
(a) China (b) Russia (c) Singapore
(d) Bangladesh (e) Sri Lanka

138. Who is the CEO of The Royal Bank of Scotland?
(a) John Cryan (b) Alison Rose
(c) Johan Petrus Burger (d) Wee Ee Cheong
(e) None of these

139. Where is the headquarter of Deutsche Bank?
(a) Taiwan (b) Germany (c) France
(d) Netherland (e) None of these

140. Where is the headquarter of First Rand Bank?
(a) USA (b) South Africa (c) Brazil
(d) Australia (e) None of these

141. Which of the following is the the First Bank in India?
(a) Bank of Calcutta
(b) General Bank of India
(c) Bank of Hindustan
(d) Bank of Madras
(e) None of these

142. Who was the First Governor of RBI?
(a) M. Narasimham (b) James Braid Taylor
(c) Mr. C D Deshmukh (d) Mr. Osborne Smith
(e) None of these

143. Name the First Indian governor of RBI?
(a) M. Narasimham (b) Benegal Rama Rau
(c) Mr. C D Deshmukh (d) P. C. Bhattacharya
(e) Mr. Osborne Smith

144. Name the First Bank to Introduce ATM in India?
(a) HSBC (b) ICICI (c) SBI
(d) HDFC (e) None of these

145. Name the First Bank to introduce saving Bank in India?
(a) Bank of Hindustan (b) Syndicate Bank
(c) Bengal Bank (d) Presidency Bank
(e) None of these

146. Name the First Bank to Introduce Cheque system in India?
(a) Central Bank of India (b) Presidency bank
(c) Bengal Bank (d) HSBC
(e) ICICI Bank

147. Name the First Bank to introduce Internet Banking?
(a) Axis Bank (b) HDFC Bank (c) SBI
(d) ICICI Bank (e) HSBC Bank

148. Name the First Bank to introduce Mutual Fund?
(a) ICICI Bank (b) SBI
(c) Central Bank of India (d) Bank of Baroda
(e) None of these

149. Name the First Bank to introduce Credit Card in India?
(a) SBI (b) HDFC
(c) ICICI (d) Punjab National Bank
(e) Central Bank of India

150. In which state, The 4th edition of 'Buxa Bird Festival' was celebrated?
(a) Tripura (b) Nagaland
(c) West Bengal (d) Maharashtra
(e) Bihar

151. Name the oldest Joint Stock Bank of India?
(a) Allahabad Bank (b) Punjab National Bank
(c) Central Bank of India (d) Bank of Madras
(e) Bank of India

152. Name the First Indian bank to open branch outside India in London in 1946?
(a) Union Bank of India (b) State Bank of India
(c) Central Bank of India (d) Bank of India
(e) None of these

153. Name the First Regional Rural Bank name Prathama Grameen Bank was started by?
(a) RBI (b) State Bank of India
(c) Syndicate Bank (d) NABARD
(e) Bank of India

154. Name the first bank to provide mobile ATM?
(a) SBI (b) ICICI Bank
(c) Karnataka Bank (d) Dena Bank
(e) Axis Bank

155. Name the First Universal Bank in India?
(a) SBI (b) ICICI Bank (c) PNB
(d) HDFC (e) Axis Bank

156. Name the First Bank in India to launch its own Payment Aggregators?
(a) ICICI Bank (b) State Bank of India
(c) Dena Bank (d) Yes Bank
(e) HDFC Bank

157. Name the First India bank Got ISO?
(a) ICICI Bank (b) South Indian Bank
(c) Dena Bank (d) Canara Bank
(e) SBI

158. Where was the first Headquarters of Reserve Bank of India (RBI)?
(a) New Delhi (b) Lucknow (c) Kolkata
(d) Chennai (e) None of these

159. PMMY were launched on 08 April 2015 by the Hon'ble Prime Minister Narendra Modi. What is the full form of PMMY?
(a) Pradhan Manager MUDRA Yojana
(b) Pradhan Mantri MUDRA Yatra
(c) Pradhan Mantri MUDRA Yojana
(d) Pramukh Mantri MUDRA Yojana
(e) None of the above

160. Who is the minister of Personnel, Public Grievances and Pensions, Department of Atomic Energy, Department of Space and All-important policy issues?
(a) Arun Jaitley (b) Narendra Modi
(c) Raj Nath Singh (d) Smt. Sushma Swaraj
(e) None of these

161. Who is the Home Affairs minister of India?
(a) Arun Jaitley (b) Smt. Sushma Swaraj
(c) Shri Amit Shah (d) Sushri Uma Bharati
(e) None of these

162. Who is the External Affairs, Overseas Indian Affairs minister of India?
(a) Arun Jaitley
(b) Dr. Subrahmanyam Jaishankar
(c) Raj Nath Singh
(d) Sushri Uma Bharati
(e) Narendra Singh Tomar

163. Who is the Finance, minister of India?
(a) Suresh Prabhu
(b) Raj Nath Singh
(c) Smt. Sushma Swaraj
(d) Smt. Nirmala Sitharaman
(e) None of these

164. Who is the Ministry of Rural Development, Ministry of Agriculture & Farmers Welfare and Ministry of Panchayati Raj?
(a) Nitin Jairam Gadkari
(b) Shri Narendra Singh Tomar
(c) Sushri Uma Bharati
(d) Kalraj Mishra
(e) None of these

165. Who is the Road Transport and Highways, Shipping minister of India?
(a) Ravi Shankar Prasad
(b) Nitin Jairam Gadkari
(c) Smt. Maneka Sanjay Gandhi
(d) Ramvilas Paswan
(e) Narendra Singh Tomar

166. Who is the Defense minister of India?
(a) Ravi Shankar Prasad (b) Arun Jaitley
(c) Suresh Prabhu (d) Ananthkumar
(e) Shri Raj Nath Singh

167. Who is the Railways minister of India?
(a) Chaudhary Birender Singh
(b) Anant Geete
(c) Ravi Shankar Prasad
(d) Suresh Prabhu
(e) Piyush Goyal

168. Who is the Statistics & Programme Implementation minister of India?
(a) Rao Inderjit Singh
(b) Ashok Gajapathi Raju Pusapati
(c) Smt. Harsimrat Kaur Badal
(d) Narendra Singh Tomar
(e) None of these

169. Who is the Drinking Water & Sanitation minister of India?
(a) Smt. Harsimrat Kaur Badal
(b) Jagat Prakash Nadda
(c) Shri Gajendra Singh Shekhawat
(d) Ramvilas Paswan
(e) None of these

170. Who is the Consumer Affairs, Food and Public Distribution minister of India?
(a) Ashok Gajapathi Raju Pusapati
(b) Kalraj Mishra
(c) Ramvilas Paswan
(d) Jual Oram
(e) None of these

171. Who is the Micro, Small and Medium Enterprises minister of India?
(a) Smt. Maneka Sanjay Gandhi
(b) Shri Nitin Jairam Gadkari
(c) Thawar Chand Gehlot
(d) Smt. Smriti Zubin Irani
(e) None of these

172. Who is the Women and Child Development minister of India?
(a) Ravi Shankar Prasad
(b) Nitin Jairam Gadkari
(c) Smt. Smriti Zubin Irani
(d) Ramvilas Paswan
(e) Narendra Singh Tomar

173. Sahitya akademi award given in how many languages?
(a) 19 (b) 22 (c) 24
(d) 25 (e) None of these

174. Who is the Law & Justice, Electronics & Information Technology minister of India?
(a) Chaudhary Birender Singh
(b) Anant Geete
(c) Ravi Shankar Prasad
(d) Suresh Prabhu
(e) None of these

175. Who is the Health and Family Welfare minister of India?
(a) Smt. Harsimrat Kaur Badal
(b) DR. HARSH VARDHAN
(c) Sushri Uma Bharati
(d) Ramvilas Paswan
(e) None of these

176. Who is the Civil Aviation minister of India?
(a) D.V. Sadananda Gowda
(b) Shri Hardeep S Puri
(c) Smt. Harsimrat Kaur Badal
(d) Narendra Singh Tomar
(e) None of these

177. Who is the Heavy Industries and Public Enterprises minister of India?
(a) Ananthkumar
(b) Shri Prakash Keshav Javadekar
(c) Chaudhary Birender Singh
(d) Anant Geete
(e) None of these

178. Who is the Food Processing Industries minister of India?
(a) Thawar Chand Gehlot
(b) Smt. Harsimrat Kaur Badal
(c) Dr. Harsh Vardhan
(d) Smt. Smriti Zubin Irani
(e) None of these

179. What is the cash prize in the Lal Bahadur Shastri National Award?
(a) Rs. 100,000 (b) Rs. 600,000
(c) Rs. 2,50,000 (d) Rs. 200,000
(e) Rs. 500,000

180. Who is the steel minister of India?
(a) Shri Dharmendra Pradhan
(b) Anant Geete (c) Ravi Shankar Prasad
(d) Suresh Prabhu (e) None of these

181. Who is the Tribal Affairs minister of India?
(a) Ashok Gajapathi Raju Pusapati
(b) Kalraj Mishra
(c) Ramvilas Paswan
(d) Shri Arjun Munda
(e) None of these

182. Who is the Agriculture & Farmers Welfare minister of India?
(a) D.V. Sadananda Gowda
(b) Prakash Javadekar
(c) Shri Narendra Singh Tomar
(d) Kalraj Mishra
(e) None of these

183. Who is the Social Justice and Empowerment minister of India?
(a) Smt. Maneka Sanjay Gandhi
(b) Kalraj Mishra
(c) Shri Thaawar Chand Gehlot
(d) Smt. Smriti Zubin Irani
(e) None of these

184. Who is the Textiles minister of India?
(a) Thawar Chand Gehlot
(b) Smt. Harsimrat Kaur Badal
(c) Dr. Harsh Vardhan
(d) Smt. Smriti Zubin Irani
(e) None of these

185. Who is the Science and Technology, Earth Sciences, Environment, Forest and Climate Change minister of India?
(a) Dr. Harsh Vardhan
(b) Smt. Harsimrat Kaur Badal
(c) Jagat Prakash Nadda
(d) Nitin Jairam Gadkari
(e) None of these

186. BAFTA' award is associated with-
(a) Banking Sector
(b) Cinema
(c) Insurance Sector
(d) Tourism
(e) None of these

187. Who is the Information & Broadcasting minister of India?
(a) Shri Prakash Javadekar
(b) Ravi Shankar Prasad
(c) Smt. Harsimrat Kaur Badal
(d) Chaudhary Birender Singh
(e) None of these

188. DIPP is the nodal agency in the field of foreign investments in India. What is the full form of DIPP?
(a) Department of Industry Policy and Promotion
(b) Department of Innovation Policy and Promotion
(c) Department of Industrial Policy and Promotion
(d) Department of Industrial Policy and Partnership
(e) Department of Internet Pulse and Partnership

189. Stockholm is the capital of _____.
(a) Norway (b) Sweden (c) Netherlands
(d) Ireland (e) France

190. Who has announced to launch his new book "Immortal India"?
(a) Jumpa Lahiri (b) Vikram seth
(c) Kiran Desai (d) Amish Tripathi
(e) None of these

191. The annual Balijatra festival celebrated on the banks of river Mahanadi in which city?
(a) Raipur (b) Sambalpur (c) Angul
(d) Cuttack (e) Jharsuguda

192. Who is the author of the book "President's Lady" (Pranaber Preyosi)?
(a) Ravinder Gupta (b) Neehar Mishra
(c) Sangeeta Ghosh (d) Chinu Modi
(e) None of these

193. The World Bank is like a cooperative, made up of ---------- member countries. These member countries, or shareholders, are represented by a Board of Governors, who are the ultimate policymakers at the World Bank?
(a) 189 (b) 193 (c) 159
(d) 173 (e) 187

194. The book titled "The Shershah of Kargil" is a biography of Kargil war hero Late Captain Vikram Batra, who was posthumously awarded Param veer Chakra (PVC) – the highest gallantry award of India. The book is written by?
(a) Deepak Surana (b) Balraj Joshi
(c) Shakti Singh (d) PK Singh
(e) None of these

195. Who is newly appointed governor of Meghalaya?
(a) Jagdish Mukhi
(b) Satya Pal Malik
(c) Brigadier (Retd.) BD Mishra
(d) Banwarilal Purohit
(e) Shri Ravindra Narayana Ravi

196. The biography of Hema Malini named 'Hema Malini: Beyond the Dream Girl' was launched recently. The biography has been penned by journalist turned writer _____?
(a) Yoshita Singh
(b) Ram Kamal Mukherjee
(c) Shrilal Shukla
(d) Dnyaneshwar M. Mulay
(e) Shri Ravindra Narayana Ravi

197. The book titled "Dreamnation: Uniting a Country with Handwritten Dreams" has been co-authored by?
(a) Saji Mathew and Jubie John
(b) Subroto Bagchi and Y.S. Rajan
(c) Jubie John and Srijan Pal Singh
(d) Y.S. Rajan and Saji Mathew
(e) None of these

198. Who is the Governor of Tripura?
(a) Padmanabha Balkrishna Acharya
(b) Nirbhay Sharma
(c) V. Shanmuganathan
(d) Shri Ramesh Bais
(e) None of these

199. Y Sanathoi Devi is associated with which sports?
(a) Hockey (b) Football (c) Wushu
(d) Badminton (e) None of these

200. Which of the following Indian states has the highest onion production in the country?
(a) Bihar (b) Maharashtra
(c) Gujarat (d) Rajasthan (e) Karnataka

201. Badrinath a holy town is situated on the bank of which river?
(a) Brahmani River (b) Bhadra River
(c) Alaknanda River (d) Brahmani
(e) Brahmaputra river

202. Bhadravati is an industrial city is situated on the bank of which river?
(a) Brahmani River (b) Bhadra River
(c) Alaknanda River (d) Brahmani
(e) Brahmaputra river

203. Rourkela is situated on the bank of which river?
(a) Brahmani River (b) Bhadra River
(c) Alaknanda River (d) Brahmani
(e) Brahmaputra river

204. Dibrugarh is situated on the bank of which river?
(a) Brahmani River (b) Bhadra River
(c) Alaknanda River (d) Brahmani
(e) Brahmaputra river

205. The Chutka Nuclear Power Plant is located in which state of India?
(a) Gujarat (b) Haryana
(c) Madhya Pradesh (d) Maharashtra
(e) None of these

206. Kota is situated on the bank of which river?
(a) Brahmani River (b) Chambal River
(c) Alaknanda River (d) Brahmani
(e) Brahmaputra river

207. Chennai is situated on the bank of which river?
(a) Brahmani River (b) Chambal River
(c) Alaknanda River (d) Adyar River
(e) Brahmaputra river

208. Daman is situated on the bank of which river?
(a) Brahmani River (b) Chambal River
(c) Daman Ganga River (d) Adyar River
(e) Brahmaputra river

209. Mirzapur is situated on the bank of which river?
(a) Alaknanda River (b) Ganga River
(c) Chambal River (d) Adyar River
(e) Brahmaputra river

210. Bagalkot is situated on the bank of which river?
(a) Brahmani River (b) Ganga River
(c) Chambal River (d) Adyar River
(e) Ghataprabha River

211. Rajamahendravaram is situated on the bank of which river ?
(a) Brahmani River (b) Ganga River
(c) Girna river (d) Godavari River
(e) Ghataprabha River

212. Jaunpur is situated on the bank of which river?
(a) Brahmani River (b) Gomti River
(c) Girna river (d) Godavari River
(e) Ghataprabha River

213. Kolkata city is situated on the bank of which river?
(a) Yamuna (b) Ganga River
(c) Girna river (d) Godavari River
(e) Hugli (Hooghly) River

214. Srinagar is situated on the bank of which river ?
(a) Yamuna (b) Ganga River
(c) Girna river (d) Godavari River
(e) Jhelum River

215. Karwar is situated on the bank of which river?
(a) Yamuna (b) Kali river
(c) Girna river (d) Godavari River
(e) Jhelum River

216. Erode is situated on the bank of which river?
(a) Yamuna (b) Kali river
(c) Kaveri River (d) Godavari River
(e) Jhelum River

217. Vijayawada is situated on the bank of which river?
(a) Yamuna (b) Kali river
(c) Krishna River (d) Godavari River
(e) Jhelum River

218. Banki is situated on the bank of which river?
(a) Yamuna (b) Kali river
(c) Mahanadi River (d) Godavari River
(e) Jhelum River

219. Kuchipudi Dance a classical dances from which state?
(a) Assam (b) Bihar
(c) Andhra Pradesh (d) Tamil Nadu
(e) None of these

220. Bihu is a folk dance performed in which state?
(a) Himachal Pradesh (b) Assam
(c) Jammu and Kashmir (d) Uttarakhand
(e) Andhra Pradesh

221. Bardo Chham dance is a folk dance performed in which state?
(a) Himachal Pradesh (b) Arunachal Pradesh
(c) Jammu and Kashmir (d) Uttarakhand
(e) Andhra Pradesh

222. Jhijhian dance is a folk dance performed in which state?
(a) Himachal Pradesh (b) Bihar
(c) Jammu and Kashmir (d) Uttarakhand
(e) Andhra Pradesh

223. Raut Nacha Dance is a folk dance performed in which state?
(a) Himachal Pradesh (b) Bihar
(c) Jammu and Kashmir (d) Chhattisgarh
(e) None of these

224. Garba Dance is a folk dance performed in which state?
(a) jammu and Kashmir (b) Bihar
(c) Gujarat (d) Chhattisgarh
(e) Andhra Pradesh

225. The Phag Dance is a folk dance performed in which state?
(a) Himachal Pradesh (b) Bihar
(c) Gujarat (d) Chhattisgarh
(e) Haryana

226. The Nati Dance is a folk dance performed in which state?
(a) Himachal Pradesh (b) Bihar
(c) Gujarat (d) Chhattisgarh
(e) Haryana

227. The Namgen Dance is a folk dance performed in which state?
(a) Goa (b) Tamil Nadu
(c) Rajasthan (d) Himachal Pradesh
(e) None of these

228. The Rauf Dance is a folk dance performed in which state?
(a) Himachal Pradesh (b) Jammu and Kashmir
(c) Gujarat (d) Chhattisgarh
(e) Haryana

229. The Karma Dance is a folk dance performed in which state?
(a) Jharkhand (b) Jammu and Kashmir
(c) Gujarat (d) Tamil Nadu
(e) Haryana

230. The Yakshagana Dance is a folk dance performed in which state?
(a) Jharkhand (b) Punjab
(c) Karnataka (d) Kerala
(e) Haryana

231. Kathakali Dance is a classical dance performed in which state?
(a) Jharkhand (b) Andhra Pradesh
(c) Tamil Nadu (d) Chhattisgarh
(e) Kerala

232. Lava Dance Dance is a folk dance performed in which state?
(a) Jharkhand (b) Andhra Pradesh
(c) Tamil Nadu (d) Lakshadweep
(e) Kerala

233. Tertali Dance is a folk dance performed in which state?
(a) Jharkhand (b) Andhra Pradesh
(c) Tamil Nadu (d) Madhya Pradesh
(e) Kerala

234. Cheraw Dance is a folk dance performed in which state?
(a) Jharkhand (b) Andhra Pradesh
(c) Mizoram (d) Lakshadweep
(e) Kerala

235. Dhol Cholom Dance is a folk dance performed in which state?
(a) Jharkhand (b) Assam
(c) Mizoram (d) Lakshadweep
(e) Manipur

236. Lavani Dance is a folk dance performed in which state?
(a) Jharkhand (b) Maharashtra
(c) Mizoram (d) Lakshadweep
(e) Manipur

237. Odissi is a classical dance performed in which state?
(a) Jharkhand (b) Maharashtra
(c) Mizoram (d) Odisha
(e) Manipur

238. Garadi Dance is a folk dance performed in which state?
(a) Jharkhand (b) Maharashtra
(c) Puducherry (d) Odisha
(e) Manipur

239. Gambhira Dance is a folk dance performed in which state?
(a) Jharkhand (b) Maharashtra
(c) West Bengal (d) Odisha
(e) Manipur

240. Bhangra Dance is a folk dance performed in which state?
(a) Gujarat (b) Maharashtra
(c) West Bengal (d) Odisha
(e) Punjab

241. Ghoomar Dance is a folk dance performed in which state?
(a) Rajasthan (b) Maharashtra
(c) West Bengal (d) Odisha
(e) Punjab

Q242. Singhi Chham Danc is a folk dance performed in which state?
(a) Rajasthan (b) Maharashtra
(c) Sikkim (d) Odisha
(e) Punjab

243. Bharatanatyam Dance is a classical dance performed in which state?
(a) Rajasthan (b) Tamil Nadu
(c) Sikkim (d) Odisha
(e) Punjab

244. Srivari Brahmotsavam is the most important annual festival celebrated in which state?
(a) Arunachal Pradesh. (b) Kerala
(c) Andhra Pradesh (d) Tamil Nadu
(e) Tripura

245. Ugadi festival is not celebrated in which of the following state?
(a) Andhra Pradesh (b) Telangana
(c) Odisha (d) Karnataka
(e) None of the above

246. The Deccan Festival is celebrated in which state of India?
(a) Andhra Pradesh. (b) Maharashtra
(c) Karnataka (d) Arunachal Pradesh
(e) Kerala

247. The Murung Festival is celebrated in which state of India?
(a) Andhra Pradesh. (b) Maharashtra
(c) Karnataka (d) Arunachal Pradesh
(e) Kerala

248. Ambubachi Mela is celebrated in which state of India?
(a) Andhra Pradesh. (b) Maharashtra
(c) Karnataka (d) Assam
(e) Kerala

249. Bihula is celebrated in which state of India?
(a) Andhra Pradesh. (b) Bihar
(c) Assam (d) Karnataka
(e) Kerala

250. Fontainhas Festival of art celebrated every year in which state?
(a) Andhra Pradesh. (b) GOA
(c) Assam (d) Karnataka
(e) Kerala

251. Kite Festival of art celebrated every year in which year?
(a) Andhra Pradesh. (b) Gujarat
(c) Assam (d) Karnataka
(e) Kerala

252. Dosmoche Annual Festival of Music celebrated every year in which year?
(a) Andhra Pradesh. (b) Gujarat
(c) Ladakh
(d) Karnataka
(e) Kerala

253. Matho Nagrang Festival celebrated every year in which state of india?
(a) Andhra Pradesh. (b) Uttar Pradesh
(c) Jammu and Kashmir (d) Karnataka
(e) Kerala

254. Sarhul Festival celebrated in which state of india?
(a) Andhra Pradesh. (b) Gujarat
(c) Jharkhand (d) Bihar
(e) Manipur

255. Pattadakkal Dance Festival celebrated in which state of india?
(a) Uttar Pradesh. (b) Gujarat
(c) Jharkhand (d) Karnataka
(e) Kerala

256. The annual Vaikathashtami Festival celebrated in which state of india?
(a) Andhra Pradesh. (b) Goa
(c) Jharkhand (d) Karnataka
(e) Kerala

257. Khajuraho dance Festival celebrated in which state of India?
(a) Andhra Pradesh. (b) Madhya Pradesh
(c) Jharkhand (d) Rajasthans
(e) Karnataka

258. Kalidas Festival celebrated in which state of India?
(a) Sikkim (b) Uttar Pradesh
(c) Jharkhand (d) Sikkim
(e) Maharashtra

259. The Srisailam Dam is constructed across the Krishna River , situated in which state of India ?
(a) Karnataka (b) Andhra Pradesh
(c) Chhattisgarh (d) Kerala
(e) Tripura

260. The Nagarjuna Sagar Dam is constructed across the Krishna River, situated in which state of India?
(a) Uttar Pradesh (b) Andhra Pradesh
(c) Chhattisgarh (d) Himachal Pradesh
(e) Telangana

261. Nagi Dam is located in which state of India?
(a) Karnataka (b) Bihar
(c) Chhattisgarh (d) Kerala
(e) Telangana

262. Hasdeo Bango Dam is constructed across the Hasdeo river, situated in which state of India?
(a) Karnataka (b) Uttar Pradesh
(c) Chhattisgarh (d) Kerala
(e) Telangana

263. The Sardar Sarovar Dam is constructed across the Narmada river, situated in which state of India?
(a) Odisha (b) Gujarat
(c) Chhattisgarh (d) Kerala
(e) Telangana

264. Bhakra Dam is constructed across the Sutlej river, situated in which state of India?
(a) Goa (b) West Bengal
(c) Chhattisgarh (d) Himachal Pradesh
(e) Telangana

265. Salal Dam is constructed across the Chenab river , situated in which state of India?
(a) Jammu and Kashmir (b) Gujarat
(c) Chhattisgarh (d) Himachal Pradesh
(e) Telangana

266. Baglihar Dam is constructed across the Chenab river , situated in which state of India?
(a) Haryana (b) Rajasthan
(c) Jammu and Kashmir (d) Punjab
(e) None of these

267. The Maithon Dam is constructed across the Barakar river , situated in which state of India?
(a) Jammu and Kashmir
(b) Gujarat
(c) Chhattisgarh
(d) Jharkhand
(e) Telangana

268. Krishna Raja Sagara is the name of both a lake and the dam, situated in which state of India?
(a) Jammu and Kashmir (b) Karnataka
(c) Chhattisgarh (d) Jharkhand
(e) Bihar

269. The Koyna Hydroelectric power plants located in which state of India?
(a) Maharashtra (b) Kerala
(c) Andhra Pradesh (d) Uttarakhand
(e) None of these

270. Hirakud Dam is located in which state of India?
(a) Uttar Pradesh (b) Odisha
(c) Andhra Pradesh (d) Uttarakhand
(e) None of these

271. The Idukki Dam is located in which state of India?
(a) Punjab (b) Kerala (c) Andhra Pradesh
(d) Uttar Pradesh (e) None of these

272. Nagarjuna Sagar Dam is located in which state of India ?
(a) Gujarat (b) Rajasthan (c) Andhra Pradesh
(d) Uttarakhand (e) None of these

273. The Tehri Dam is located in which state of India ?
(a) Maharashtra (b) Sikkim (c) Andhra Pradesh
(d) Uttarakhand (e) None of these

274. Who was the first Indian woman President of Indian National Congress(INC)?
(a) Padmaja Naidu
(b) Sarojini Naidu (c) Sucheta Kriplani
(d) Kasturba Gandhi (e) None of these

275. Who is the first Indian woman to win the Booker Prize?
(a) Jhumpa Lahiri (b) Arundhati Roy
(c) Kiran Desai (d) Anita Desai
(e) None of these

276. The Nathpa Jhakri Dam is located in which state of India?
(a) Rajasthan (b) Sikkim
(c) Gujarat (d) Himachal Pradesh
(e) None of these

277. Who was the first woman pilot of Indian Airlines?
(a) Punita Arora (b) Harita Kaur Deol
(c) Durba Banerjee (d) Prem Mathur
(e) None of these

278. The Indira Sagar Dam is located in which state of India?
(a) Bihar (b) Madhya Pradesh
(c) Gujarat (d) Himachal Pradesh
(e) None of these

279. The Pandoh Dam is located in which state of India?
(a) Andhra Pradesh (b) Madhya Pradesh
(c) Gujarat (d) Himachal Pradesh
(e) None of these

280. Kalinadi Nagjhari Hydroelectric Power Plant is located in which state of India?
(a) Karnataka (b) Madhya Pradesh
(c) Gujarat (d) Himachal Pradesh
(e) None of these

281. Teesta-V Power Station is located in which state of India?
(a) Andhra Pradesh (b) Rajasthan
(c) Gujarat (d) Sikkim
(e) None of these

282. Baira Siul Power Station is located in which state of India?
(a) Andhra Pradesh (b) West Bengal
(c) Himachal Pradesh (d) Sikkim
(e) None of these

283. Machkund Hydroelectric Project is located in which state of India?
(a) Andhra Pradesh (b) Bihar
(c) Uttar Pradesh (d) Sikkim
(e) None of these

284. Balimela Hydroelectric Power Plant India is located in which state of India?
(a) Andhra Pradesh (b) Madhya Pradesh
(c) Odisha (d) Sikkim
(e) None of these

285. Subarnarekha Hydroelectric Power Plant India is located in which state of India?
(a) Andhra Pradesh (b) Jharkhand
(c) Orissa (d) Sikkim
(e) None of these

286. Loktak Power Station is located in which state of India?
(a) Andhra Pradesh (b) Manipur
(c) Bihar (d) Sikkim
(e) None of these

287. Rangit Hydroelectric Power Project Stage III is located in which state of India?
(a) Andhra Pradesh (b) Jharkhand
(c) Orissa (d) Sikkim
(e) None of these

288. Bansagar Dam is located in which state of India?
(a) Madhya Pradesh (b) Jharkhand
(c) Orissa (d) Sikkim
(e) None of these

289. Uri Dam is located in which state of India?
(a) Madhya Pradesh (b) Jharkhand
(c) Jammu and Kashmir (d) Sikkim
(e) None of these

290. Singrauli Super Thermal Power Plant is located in which state of India?
(a) Madhya Pradesh (b) Jharkhand
(c) Uttar Pradesh (d) Sikkim
(e) None of these

291. Who was the first President of India?
(a) Indira Gandhi (b) Lala Lajpat Rai
(c) Jawaharlal Nehru (d) Rajendra Prasad
(e) None of these

292. Who was the first Prime Minister of India?
(a) Jawaharlal Nehru (b) Lala Lajpat Rai
(c) Indira Gandhi (d) Lal Bahadur Shastri
(e) None of these

293. Who was the first Governor-General of independent India?
(a) George VI
(b) Prince Philip
(c) Lord Lewis Mountbatten
(d) Edward VIII
(e) None of these

294. Who was the First Indian Governor General of the country?
(a) K. Kamaraj
(b) Chakravarti Rajgopalachari
(c) Vallabhbhai Patel
(d) C.V. Raman
(e) None of these

295. Who was the first Indian Commander-in-Chief of India?
(a) Kodandera Subayya Thimayya
(b) Sam Manekshaw
(c) Roy Bucher
(d) Kodandera Madappa Cariappa
(e) None of these

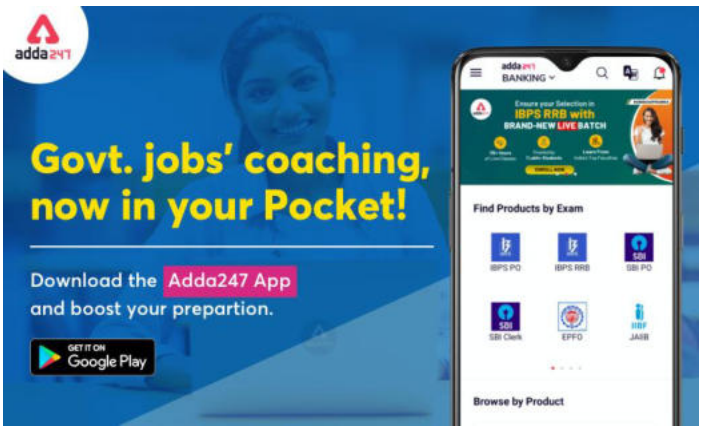
296. Who was the first Indian Army officer to be promoted to the rank of field marshal?
(a) J. F. R. Jacob (b) Jagjit Singh Aurora
(c) S.H.F.J. Manekshaw (d) Arjan Singh
(e) None of these

297. Who was the first Speaker of the Lok Sabha?
(a) Rajendra Prasad
(b) Ganesh Vasudev Mavalankar
(c) Sucheta Kriplani
(d) M. A. Ayyangar
(e) None of these

298. Who was the first Vice President of India?
(a) Zakir Husain
(b) C.V. Raman
(c) Sarvepalli Radhakrishnan
(d) Jyotirao Phule
(e) None of these

299. Who was the India's first home minister and also the first deputy prime minister?
(a) Subhas Chandra Bose
(b) Abul Kalam Azad
(c) Vallabhbhai Jhaverbhai Patel
(d) Bal Gangadhar Tilak
(e) None of these

300. was an Indian lawyer, economist and politician who served as independent India's first finance minister?
(a) Morarji Desai
(b) C. D. Deshmukh
(c) John Mathai
(d) R. K. Shanmukham Chetty
(e) None of these



Solutions

1. **(a);** Standard & Poor's Financial Services is an American (New York, USA) financial services company. It is a division of S&P Global that publishes financial research and analysis on stocks, bonds and commodities

2. **(c);** The Pulitzer Prize is an award for achievements in newspaper, magazine and online journalism, literature, and musical composition in the United States. It was established in 1917 by provisions in the will of American Joseph Pulitzer who had made his fortune as a newspaper publisher, and is administered by Columbia University in New York City.

3. **(e);**

4. **(c);** Bhitarkanika National Park is a national park located in Kendrapara district of Odisha in eastern India. Core area of 145 square kilometre of the Bhitarkanika Wild Sanctuary, spread over 672 km2.The national park is surrounded by the Bhitarkanika Wildlife Sanctuary. Gahirmatha Beach and Marine Sanctuary lies to the east, and separates swamp region cover with canopy of mangroves from the Bay of Bengal. Thus it become a vicinity of rich biodiversity.

5. **(b);** Cairo, Egypt's sprawling capital, is set on the Nile River. At its heart Tahrir Square and the vast Egyptian Museum, a trove of antiquities including royal mummies and gilded King Tutankhamun artifacts. The currency of Egypt is Egyptian pound.

6. **(c);** Shri Kalraj Mishra is the Present Governor of Rajasthan.

7. **(c);** Sagarika Ghose's book is about the irrelevant Indians - the English speaking privileged few who have controlled post-Independence India - giving ground to a new Indian order. She explores modern day India through the eyes of several characters, the "gin drinkers" of the book's title. Uma is the Oxford graduate returned to Delhi with the customary English beau in tow.

8. **(a);** Lal Bahadur Shastri International Airport is a public airport located at Babatpur 26 km (16 mi) northwest of Varanasi, Uttar Pradesh, India.

9. **(c);** Abdelaziz Bouteflika is an Algerian politician who has been the fifth President of Algeria since 1999. He was Minister of Foreign Affairs from 1963 to 1979. As President, he presided over the end of the bloody Algerian Civil War in 2002.

10. **(c);** Ganga Prasad is an Indian politician who is currently the Governor of the state of Sikkim and former Governor of Meghalaya.

11. **(c);**

12. **(e);** Lengteng Wildlife Sanctuary. Lengteng Wildlife Sanctuary is a protected area in Champhai district in eastern Mizoram, northeast India. It is an alpine forest and contains the second highest peak in Mizoram. It is specially a conservation interest on rare species of birds.

13. **(e);** Satpura National Park is nurtured in the Satpura Range of Hoshangabad district in Madhya Pradesh. With inclusion of Pachmarhi & Bori Sanctuaries, Satpura Tiger Reserve it covers 1427 km2. It came into light by British Officer Captain J. Forsyth when he was in action against Indian freedom fighter during 1857. Captain Forsyth belongs to Bengal Cavalary Regiment and was in search of famous freedom fighter Tantya Tope. While following the information, he accidently reached the highlands of Central India and find the place suitable for military base.

14. **(d);** Girna Dam, is an earthfill dam on Girna river near Malegaon, Nashik district in state of Maharashtra in India.

15. **(c);**

16. **(c);** The Saraswati Samman is an annual award for outstanding prose or poetry literary works in any 22 Indian language listed in Schedule VIII of the Constitution of India. It is named after an Indian goddess of learning and is considered to be among the highest literary awards in India.

17. **(e);** Chandoli National Park National Park spread over Satara, Kolhapur and Sangli District, Maharashtra state, India, established in May 2004. Earlier it was a Wildlife Sanctuary declared in 1985. Chandoli Park is notable as the southern portion of the Sahyadri Tiger Reserve, with Koyna Wildlife Sanctuary forming the northern part of the reserve.

18. **(c);** Kakrapar Atomic Power Station is a nuclear power station in Surat, Gujarat.

19. **(b);** The Governor of Goa is a nominal head and representative of the President of India in the state of Goa. The Governor is appointed by the President for a term of 5 years. The governor of Goa is Shri Satya Pal Malik.

20. (d); Ottawa is the Capital of Canada. The Canadian dollar is the currency of Canada.

21. (c); Saurashtra Cricket Association Stadium, also known as the Khandheri Cricket Stadium, is a cricket stadium in Rajkot, India.

22. (d); The Sri Ranganathaswamy Temple or Thiruvarangam is a Hindu temple dedicated to Ranganatha, a reclining form of the Hindu deity Vishnu, located in Srirangam, Tiruchirapalli, Tamil Nadu, India .

23. (a); Nandankanan Zoological Park is a 400-hectare (990-acre) zoo and botanical garden in Bhubaneswar, Odisha, India. Established in 1960, it was opened to the public in 1979 and became the first zoo in India to join World Association of Zoos and Aquariums (WAZA) in 2009.

24. (a); Tallinn is the capital and largest city of Estonia.

25. (c); Shri Phagu Chauhan has appointed as the new Governor of Bihar.

26. (e); The Nokrek National Park (NNS) is located in West Garo Hills district of Meghalaya and covers an area of 47.48 square kilometres. It is an important habitat of the Asian elephants and is also an important bird area.

27. (d); Fugdi is a Goan folk dance performed by the women in the Konkan region during Hindu religious festivals like Ganesh Chaturthi and Vrata or towards the end of other dances like Dhalo. Fugdi is an art form that can be traced to the primeval cultural traditions of Goa.

28. (a); The Headoffice of European Bank for Reconstruction & Development (EBRD) is in London, UK.

29. (c); Indonesia Capital- Jakarta, Currency- Indonesian rupiah.

30. (e); Lokpriya Gopinath Bordoloi International Airport, also known as Guwahati International Airport and formerly as Borjhar Airport, is the primary international airport of the North-Eastern States of India, situated at Borjhar in Guwahati, Assam, named after Gopinath Bordoloi, who was a freedom fighter and also the first Chief Minister of Assam after independence.

31. (a); Konark Sun Temple is a 13th-century CE Sun Temple at Konark in Orissa, India. It is believed that the temple was built by king Narasimhadeva I of Eastern Ganga Dynasty in 1255 CE. The temple complex is in the shape of a gigantic chariot, having elaborately carved stone wheels, pillars and walls. The temple is a UNESCO World Heritage Site and has also featured on various list of Seven Wonders of India.

32. (a); London, UK is the headquarters of Amnesty International.

33. (e); Satpura National Park is nurtured in the Satpura Range of Hoshangabad district in Madhya Pradesh. With inclusion of Pachmarhi & Bori Sanctuaries, Satpura Tiger Reserve it covers 1427 km2. It came into light by British Officer Captain J. Forsyth when he was in action against Indian freedom fighter during 1857. Captain Forsyth belongs to Bengal Cavalary Regiment and was in search of famous freedom fighter Tantya Tope. While following the information, he accidently reached the highlands of Central India and find the place suitable for military base.

34. (c); The Indian Space Research Organisation, is the space agency of the Indian government headquartered in the city of Bangalore. Its vision is to "harness space technology for national development", while pursuing space science research and planetary exploration.

35. (c); Kumharia Nuclear Power is commercial nuclear plant in Haryana state. It can generate 640MW of electric power which is 33% lower than the average nuclear plant.

36. (d); National Rural Livelihood Mission (NRLM) is a poverty alleviation project implemented by Ministry of Rural Development, Government of India. This scheme is focused on promoting self-employment and organization of rural poor.

37. (c);

38. (d); Dudhawa Dam is located in Dhamtari district of Chhattisgarh in India. It is built across the Mahanadi river in the village of Dudhawa.

39. (c); India's Parul Parmar defeated Thailand's Wannaphatdee Kamtam in the finals of the women's singles Standing Lower (SL3) to win gold in BWF Para-Badminton World Championships in Ulsan, South Korea.

40. (b); Giuseppe Conte is an Italian jurist and politician serving as the 58th and current Prime Minister of Italy since 1 June 2018.

41. (a); Jeakson Thounaojam became the first Indian to score a goal in FIFA World Cup.

42. (d); Khajuraho dance festival, organized by the Madhya Pradesh Kala Parishad, is a one-week-long festival of classical dances held annually against the spectacular backdrop of the magnificently lit Khajuraho temples in Chhatarpur district of Madhya Pradesh state in central India.

43. (d); The Araku Valley of Andhra Pradesh is hosted the first edition of its Hot Air Balloon Festival.

44. (c); The International Maritime Organisation (IMO), formed in 1959, is the specialized agency of United Nations responsible for improving maritime safety and preventing pollution from ships. Its headquarters are located at London, United Kingdom.

45. (d); The Rollapadu Wildlife Sanctuary (RWS) is located in the Kurnool district of Andhra Pradesh and is spread over an area of 6.14 square kilometers.

46. (d); Santiago de Chile or simply Santiago, is the capital and largest city of Chile as well as one of the largest cities in the Americas.

47. (b); The 2017 Konark dance festival has started on December 1, 2017 in backdrop of the Sun temple in Konark, Odisha. It is one of the biggest dance festivals held in India.

48. (d); Shri Ramesh Pokhriyal 'Nishank' is an Indian Bharatiya Janata Party (BJP) politician and is the incumbent Union Minister of Ministry of Human Resource Development (MHRD), Government of India.

49. (a); Budapest, Hungary is the Headquarters of International Weightlifting Federation (IWF).

50. (e); The Darrah National Park (DNP) is located in within the Kathiawar-Gir dry deciduous forests' ecoregion of Rajasthan and covers an area of 250 square kilometers.

51. (a); The Indian Institute of Foreign Trade (IIFT) is an autonomous public business school established in 1963 by the Government of India to help professionalize the country's foreign trade management and increase exports by developing human resources; generating, analysing and disseminating data; and conducting research. IIFT Delhi Centre is located in the Qutab Institutional Area in close vicinity of Jawaharlal Nehru University and the Indian Institute of Technology in New Delhi, India and is spread over 6 acres of land

52. (e); Idamalayar Dam is a multipurpose concrete gravity dam located at Ennakal, near Bhoothathankettu, on the Idamalayar River, a tributary of the Periyar River in Kerala, South India. Completed in 1985, with a length of 373 metres, the dam created a multipurpose reservoir covering 28.3 km2 in the scenic hills of the Western Ghats.

53. (b); The North Atlantic Treaty Organization (NATO) also called the North Atlantic Alliance, is an intergovernmental military alliance based on the North Atlantic Treaty which was signed on 4 April 1949.

54. (d); Cuba Capital- Havana, Currency- Cuban peso.

55. (c); Nallamala Hills are a section of the Eastern Ghats which stretch primarily over Kurnool, Nellore, Guntur, Prakasam, Kadapa and Chittoor districts of the state of Andhra Pradesh and Mahabubnagar, Nalgonda districts of the state of Telangana, in India.

56. (e); Mankombu Sambasivan Swaminathan is an Indian geneticist and international administrator, renowned for his leading role in India's Green Revolution a program under which high-yield varieties of wheat and rice seedlings were planted in the fields of poor farmers. Swaminathan is known as "Indian Father of Green Revolution" for his leadership and success in introducing and further developing high-yielding varieties of wheat in India

57. (c); Anjali Bhagwat, in full Anjali Vedpathak Bhagwat, Indian rifle shooter who won the 2002 International Shooting Sport Federation (ISSF) Champion of Champions combined-air-rifle event to become the first Indian to win that competition.

58. (c); Located on the Place de Fontenoy, in Paris, the main building which houses the Headquarters of UNESCO was inaugurated on 3 November 1958. The Y-shaped design was invented by three architects of different nationalities under the direction of an international committee.

59. (c); India was one of the first in Asia to recognize the effectiveness of the Export Processing Zone (EPZ) model in promoting exports, with Asia's first EPZ set up in Kandla, Gujarat in 1965. With a view to overcome the shortcomings experienced on account of the multiplicity of controls and clearances; absence of world-class infrastructure, and an unstable fiscal regime and with a view to attract larger foreign investments in India, the Special Economic Zones (SEZs) Policy was announced in April 2000

60. (d); The current Secretary-General of the United Nations and the ninth occupant of the post is Mr Antonio Guterres of Portugal, who took office on 01st January 2017.

61. (d); India's Sivalingam Sathish Kumar and Ragala Venkat Rahul qualified for next year's Commonwealth Games after winning a gold medal each in their respective weight divisions at the Commonwealth Senior (men & women) Weightlifting Championships in Gold Coast, Australia. These are weightlifters.

62. (a); The Group of 7 is a group consisting of Canada, France, Germany, Italy, Japan, the United Kingdom and the United States. These countries, with the 7 largest advanced economies in the world, represent more than 62% of the global net wealth. The 45th G7 summit was held in France.

63. (a); The Society for Worldwide Interbank Financial Telecommunication (SWIFT) provides a network that enables financial institutions worldwide to send and receive information about financial transactions in a secure, standardized and reliable environment.

64. (b); The State Expert Appraisal Committee (SEAC)'s function on the principle of collective responsibility. The Chairperson shall endeavour to reach a consensus in each case, and if consensus cannot be reached, the view of the majority shall prevail.

65. (c); Panna National Park is a national park located in Panna and Chhatarpur districts of Madhya Pradesh.

66. (d); The City Union Bank Limited is an Indian bank. Kumbakonam, Tamil Nadu is the headquaters of City Union Bank.

67. (d); Cheruthoni Dam, the largest concrete gravity dam in Kerala, is located close to Idukki arch dam. It is the third highest dam in India with a 454 feet-high across River Cheruthoni.

68. (e); World Pneumonia Day brings people from all over the world together uniting to demand that something be done to fight the pneumonia illness. World Pneumonia Day is marked every year on November 12th.

69. (b);

70. (c); Viswanathan Anand

71. (d); The Government of India has launched the Atal Mission for Rejuvenation and Urban Transformation (AMRUT) with the aim of providing basic civic amenities.

72. (c);

73. (a); Budapest, Hungary is the Headquarters of International Weightlifting Federation (IWF).

74. (d); The Achanakmar Wildlife Sanctuary is an Indian sanctuary in Mungeli district, Chhattisgarh State.

75. (a); Balphakram National Park, Meghalaya is one of the well known national parks in India. Balphakram National Park is home to wide species of plants and animals and is located in the midst of the Garo Hills in Meghalaya.

76. (e); Vienna is the capital and largest city of Austria and one of the nine states of Austria.

77. (c); The Ukai Dam, constructed across the Tapti River, is the largest reservoir in Gujarat.

78. (b); Dr. Rajiv Kumar is a leading Indian economist and has recently been appointed, the Vice Chairman of NITI Aayog by the government of India. He is the author of several books on India's economy and national security. His latest books are Modi & His Challenges (2016), Resurgent India: Ideas and Priorities (2015) and Exploding Aspirations: Unlocking India's Future (2014). He is a widely recognized economic columnist and a leading speaker on issues in Indian political economy.

79. (a); The Dhirubhai Ambani Solar Park at Dhursar village near Pokhran in the Jaisalmer district of Rajasthan is a 40-megawatt (MW AC) photovoltaic power station commissioned in 2012.

80. (b); Sanjeev Stalin is an Indian professional footballer who plays as a defender for Indian Arrows in the I-League.

81. (e); The JRD Tata Sports Complex Stadium is a stadium in Jamshedpur, India.

82. (c); The ICAN is made up of 468 partner organizations in 101 countries. The campaign's staff team is located in Geneva, Switzerland, from where it provides ongoing coordination and management of the campaign.

83. (d); Indira sagar dam built on the Narmada river with a height of 92m. is concrete gravity dam, located in Khandwa district of Madhya Pradesh.

84. (c); Krishnarajasagar dam built across Kaveri River near Mysore in Karnataka. It is one of the principal and largest dam built on the river Kaveri in Karnatakain, South India.

85. (a); Mettur Dam built across Kaveri River at Salem district in Tamil Nadu with a height of 120 ft. It is one the largest and one of the oldest dam built in India. Mettur Dam has biggest and the most power generating capacity dam in Tamil Nadu.

86. (a); The greatest dam of Rajasthan-Bisalpur, located in Tonk District of Rajasthan. The dam is built across the Banas River between two mountains. The largest dam of Rajasthan-Bisalpur with a height of 39m is one of the honor of Rajasthan.

87. (a); Koyna Dam is built across river koyna in Koyna Naga Maharashtra with a height of 103m. It is one of the largest dams in Maharashtra located at Western Ghats. The lake founded by the Koyna dam is called The Shivaji Lake.

88. (e); Maithon Dam is built on the river of Barakar located at Maithon and is a big dam in tribal state Jharkhand. Maithon Dam is one of the most popular dams in Jharkhand and one of the most successful multipurpose projects in India.

89. (b); The Rihand dam has been built across Rihand River a tributary of Sone river, near Pipri in the Sonbhadra district of Uttar Pradesh. The concrete gravity dam has its maximum height that is 91m.

90. (c); TungaBhadra dam is constructed across river Tungabhadra, a tributary of River Krishna, located approximately five km from Hospet town in Karnataka, which is also the largest dam in Karnataka.

91. (c); The Bhavani Sagar Dam constructed across Bhavani river, is located 80 Km away from Coimbatore city, Tamil Nadu. The Bhavanisagar dam is 8 km. long and it is the longest masonry dam in the world.

92. (c); Prime Minister Narendra Modi inaugurated various irrigation and water-related initiatives at Aji Dam in Rajkot, Gujarat including the filling of Aji dam with Narmada waters under Sauni Yojana.

93. (c); Prime Minister NarendraModi launched the SardarSarovar Dam - the world's second biggest - on the river Narmada in Gujarat.

94. (d); Vindhyachal Thermal Power Station in the Singrauli district of Madhya Pradesh, with an installed capacity of 4,760MW, is currently the biggest thermal power plant in India. It is a coal-based power plant owned and operated by NTPC.

95. (a); The 4,620MW Mundra Thermal Power Station located in the Kutch district of Gujarat is currently the second biggest operating thermal power plant in India. It is a coal-fired power plant owned and operated by Adani Power.

96. (b); The 4,000MW Mundra Ultra Mega Power Plant (UMPP), also located in the Kutch district of Gujarat, ranks as the third largest thermal power plant in India. It is a coal-fired power plant owned and operated by Coastal Gujarat Power Limited (CGPL), a subsidiary of Tata Power.

97. (e); Talcher Super Thermal Power Station or NTPC Talcher Kaniha, located in the Angul district of Odisha, is a 3,000MW coal-fired power plant owned and operated by NTPC. The power station currently ranks as the fourth largest operational thermal power plant in India.

98. (b); The 2980MW Sipat Super Thermal Power Plant located at Sipat in the Bilaspur district of Chhattisgarh, ranks as the fifth largest thermal power station in India. It is a coal-based power plant owned and operated by NTPC.

99. (c); NTPC Dadri or National Capital Power Station (NCPS) owned and operated by NTPC is located in the Gautam Budh Nagar district of Uttar Pradesh, about 48km from the Indian capital New Delhi.

100. (d); NTPC Ramagundam, a part of National Thermal Power Corporation, is a 2600 MW Power station situated at Ramagundam in Peddapalli district in the Indian state of Telangana, India.

101. (b); Korba Super Thermal Power Plant located in the Korba district of Chhattisgarh, with 2600MW of installed capacity, also ranks as the seventh largest thermal power plant in India. It is a coal-fired power plant owned and operated by NTPC.

102. (a); Rihand Thermal Power Station at Rihandnagar in the Sonebhadra district of Uttar Pradesh ranks as the ninth largest thermal power plant in India. The coal-based power plant with an installed capacity of 2,500MW is owned and operated by NTPC.

103. (c); Jharsuguda Thermal Power Plant, in the Jharsuguda district of Odisha, is currently the tenth largest thermal power plant operating in India. It is a 2400MW coal-fired power plant owned and operated by Sterlite Energy, a 100% subsidiary of Vedanta Resources.

104. (e); Power Finance Corporation Ltd (PFC) has sanctioned a term loan of Rs. 4,009 crore to the Telangana Power Generation Corporation Lt (TSGENCO) for setting up a 4000 MW thermal power plant.

105. (d); Himachal Chief Minister Virbhadra Singh inaugurated first phase of 65 MW Kashang Hydel Project in the tribal Kinnaur district. The work on 195 MW (three units of 65 MW each) Kashang Project is being executed by Himachal Pradesh Power Corporation Limited.

106. (a); This game reserve was declared a wildlife sanctuary in 1940. It is situated at the crossroads of Tamil Nadu, Kerala and Karnataka and is in the northwest of the Nilgiris. This sanctuary is home to a large variety of fauna and flora including tropical green forests and dry deciduous forests

107. (a); Periyar National Park is located in Kerala, also known as 'God's own country'. It is one of the most famous national parks of southern India and was established in 1950, covering an area of 925 square km. Surrounded by abundant and lush greenery, this wildlife sanctuary is home to a wide range of flora and fauna and was declared a Tiger Reserve in 1982.

108. (a); Located 22 km from Srinagar, Dachigam National Park is the northernmost placed national park and is spread over 140 sq. km.

109. (b); One of the most visited wildlife sanctuary in South India is Mundanthurai Wildlife Sanctuary, which is located in Thirunelvelli district of Tamil Nadu and opened in the year 1988.

110. (b); Established in the year 1976 and located in the Anaimalai Hills of Western Ghats in Coimbatore District, Tamil Nadu, the Anamalai Wildlife Sanctuary is one of the most beautiful wildlife sanctuaries of Southern India and is spread across 958 sq. km.

111. (e); Once the hunting reserve for the king of Mysore, Bandipur National Park was established as national park in the year 1978 and is located in the state of Karnataka.

112. (a); Designated as national park in the year 1987, Kudremukh National Park is located in the Chikkamagaluru district of Karnataka state.

113. (e); Eravikulam National Park is a 97 km2 national park located along the Western Ghats in the Idukki district of Kerala in India.

114. (a); Famously known for the habitat of endangered species of Giant Grizzled Squirrel of India, the Chinnar Wildlife Sanctuary is located in the Idukki district of Kerala state.

115. (a); Located in Uttaranchal, it is arguably the most well-known wildlife sanctuary of India and the most oft visited. Established in 1936 as the first national park in Asia it lies in the two districts of Nainital and Pauri in the hilly state of Uttaranchal.

116. (a); Overshadowed by the peak of Nanda Devi, the Nanda Devi National Park is located amidst the upper Himalayan ranges of the Chamoli district of Uttarakhand. The Nanda Devi National Park has one of the world's richest floral species, comprising of 312 species with around 17 rarest one.

117. (b); Hemis National Park is a high altitude national park in the eastern Ladakh region of the UT of Ladakh in India.

118. (a); Sprawled across 87 sq. km in Chamoli District, Uttarakhand, Valley of flowers is paradise on earth and is situated at the conversion point of Eastern and Western Himalayas and Zanskar ranges.

119. (c); One of the biggest national wildlife sanctuaries in India, it is located about 130 kms away from the city of Jaipur between the north and central India. It lies on a sprawling 400 acres of land in the of south-eastern Rajasthan, and was once the hunting grounds of the royal family.

120. (c); Keoladeo National Park or Keoladeo Ghana National Park formerly known as the Bharatpur Bird Sanctuary in Bharatpur, Rajasthan, India is a famous avifauna sanctuary that hosts thousands of birds, especially during the winter season.

121. (b); This wild life sanctuary in the South-west of Saurashtra Peninsula in Junagadh District of Gujarat is the only wildlife sanctuary in India that has Asiatic lions. It comprises 1412 sq. km of deciduous forest and steep rocky hills.

122. (c); Sariska National Park is nestled amidst the beautiful Aravali hills in Rajasthan and is spread across 800 sq. km and has mixed terrains, which include rocky landscapes, grasslands, sheer cliffs and dry deciduous forests. The Sariska National Park is mainly famous for its tiger reserve, allowing you to witness some of the greatest sights of tigers in region.

123. (d); This is one of the most beautiful and well maintained wildlife sanctuaries in India. Located in Madhya Pradesh, Kanha National Park was established in the year 1955. This wildlife sanctuary also forms the heart of the Kanha Tiger Reserve, created in 1974 under Project Tiger.

124. (b); Stretched from Lakhimpur Kheri to Bahraich districts in Uttar Pradesh, the Dudhwa National Park is spread across the area of 1,284.30 sq. km. and shares its northeastern boundary with Nepal.

125. (d); Located in the southern sections of Satpuda Hills in Madhya Pradesh, Pench National Park is yet another famous national park in Central India. It is named after the river Pench, which passes through the park from north to south.

126. (d); The Kaziranga National Park in the Golaghat and Nagaon districts of Assam. Situated between the two districts of Nagaon and Golaghat, this truly beautiful wildlife sanctuary in India is home to this amazing animal that breeds here in abundance.

127. (a); The Sunderbans in West Bengal forms the largest delta at the intersection of Ganges, Meghna and Brahmaputra rivers.This large and magnificent jungle is spread between two countries, Bangladesh and India. Sunderban wildlife sanctuary is spread over an area of 4264 kms and is the habitat of the royal Bengal tiger.

128. (b); Manas National Park or Manas Wildlife Sanctuary is a national park, UNESCO Natural World Heritage site, a Project Tiger reserve, an elephant reserve and a biosphere reserve in Assam. The name of the park is originated from the Manas River, which is named after the serpent goddess Manasa. The Manas river is a major tributary of Brahmaputra River, which passes through the heart of the national park.

129. (c); It is one of the largest reserves in India and is located in the state of Sikkim. The total area that Kanchendzonga National Park covers is approximately 850 sq. km. and is one of the high altitude national parks in India, which was established in 1977.

130. (a); DBS Banks is a multinational banking and financial services corporation headquartered in Marina Bay, Singapore. The company was known as The Development Bank of Singapore Limited. The bank was set up by the Government of Singapore in July 1968 to take over the industrial financing activities from the Economic Development Board.

131. (d); AB Bank (formerly Arab Bangladesh Bank) is a leading private sector bank in Bangladesh established in 31 December 1981. This was the first joint venture private bank in Bangladesh.

132. (d); ABN AMRO Bank N.V. is a Dutch bank with headquarters in Amsterdam. ABN AMRO Bank is the third-largest bank in the Netherlands. In 1991, Algemene Bank Nederland (ABN) and AMRO Bank (itself the result of a merger of the Amsterdamsche Bank and the Rotterdamsche Bank in the 1960s) agreed to merge to create the original ABN AMRO.

133. (b); The Bank of Nova Scotia, operating as Scotiabank is a Canadian multinational bank. It is the third largest bank in Canada by deposits and market capitalization. The bank was founded in Halifax, Nova Scotia, in 1832, and moved its executive offices to Toronto, Ontario, in 1900.

134. (c); Barclays is a British multinational bank and financial services company headquartered in London, UK. Barclays traces its origins to a goldsmith banking business established in the City of London in 1690.

135. (c); BNP Paribas is an international banking group with a presence in 75 countries. It was formed through the merger of Banque Nationale de Paris (BNP) (established in 1848) and Paribas (established in 1872) in 2000. BNP Paribas has the highest brand value in France.

136. (b); Citibank is the consumer division of financial services multinational Citigroup. Citibank was founded in 1812 as the City Bank of New York, later First National City Bank of New York. Citibank provides credit cards, mortgages, personal loans, commercial loans, and lines of credit.

137. (c); United Overseas Bank Limited is a Singaporean multinational banking organization headquartered in Singapore, with branches mostly found in most Southeast Asian countries and founded in 1935.

138. (b); The Royal Bank of Scotland plc is a subsidiary of Royal Bank of Scotland Group engaged in retail banking. It is established in 1727. The current CEO is Alison Rose.

139. (b); Deutsche Bank AG is a German global banking and financial services company, with its headquarters in the Deutsche Bank Twin Towers in Frankfurt. Deutsche Bank was founded in Berlin in 1870 as a specialist bank for foreign trade.

140. (b); FirstRand Limited, also referred to as FirstRand Group is the holding company of FirstRand Bank, and is a financial services provider in South Africa. It is one of the financial services providers licensed by the Reserve Bank of South Africa, the national banking regulator.

141. (c); Bank of Hindustan (1770-1832), a now defunct bank, considered as among the first modern banks in colonial India. It was established by the agency house of Alexander and Company.

142. (d); Sir Osborne Arkell Smith was the first Governor of the Reserve Bank of India, a post he held from 1 April 1935 to 30 June 1937 while C. D. Deshmukh was the first Indian governor.

143. (c); Sir Chintaman Dwarakanath Deshmukh was an Indian civil servant and the first Indian to be appointed as the Governor of the Reserve Bank of India in 1943 by the British Raj authorities while Sir Osborne Arkell Smith was the first Governor of the Reserve Bank of India.

144. (a); HSBC (The Hongkong and Shanghai Banking Corporation) was the first bank to introduce the ATM concept in India way back in 1987. It was from Diebold and installed at Andheri, Mumbai.

145. (d); Savings account system in India was started by Presidency Bank.

146. (c); Cheque system was first introduced by Bengal Bank which was established in 1784.

147. (d); ICICI Bank was the first Indian bank to provide internet banking facility.

148. (b); The mutual fund industry in India originally began in 1963 with the Unit Trust of India (UTI) as a Government of India and the Reserve Bank of India initiative. Launched in 1987, SBI Mutual Fund became the first non-UTI mutual fund in India.

149. (e); Central Bank of India was the first public bank to introduce Credit card.

150. (c);

151. (a); Allahabad Bank is a nationalized bank with its headquarters in Kolkata, India. It is the oldest joint stock bank in India. On 24 April 2014, the bank entered into its 150th year of establishment. It was founded in Allahabad in 1865.

152. (d); Bank of India was founded in 1906 in Mumbai. It became the first Indian bank to open a branch outside India in London in 1946 and the first to open a branch in continental Europe at Paris in 1974.

153. (c); Prathama Bank is the First Regional Rural Bank of India, sponsored by Syndicate Bank established on 2nd October, 1975, with its Head Office at Moradabad in accordance with Regional Rural Bank Ordinance 1975 issued on 26th September, 1975.

154. (b); ICICI Bank took technology one step further with the launch of its first mobile automated teller machine (ATM). The bank got the Reserve Bank of India (RBI) approval for the mobile ATM.

155. (b); ICICI Bank is the first Universal Bank in India.

156. (b); State Bank of India set up its payment gateway - SBI ePay — with the objective of enrolling government entities and municipal corporations as well as small traders in the online marketplace.

157. (d); Canara Bank became the first Indian Bank to get ISO certification in 1996, for "Total Branch Banking" of its Seshadripuram branch in Bangalore, it is an Indian state owned bank, and its headquarters is in Bangalore.

158. (c); The Central Office of the Reserve Bank was initially established in Calcutta but was permanently moved to Mumbai in 1937. The Central Office is where the Governor sits and where policies are formulated.

159. (c); PMMY stands for Pradhan Mantri MUDRA Yojana.

160. (b); Narendra Damodardas Modi is an Indian politician who is the current Prime Minister of India, and is the Member of Parliament for Varanasi and a member of the Bharatiya Janata Party (BJP).

161. (c); Shri Amit Shah is an Indian politician belonging to the Bharatiya Janata Party (BJP).

162. (b); Dr. Subrahmanyam Jaishankar is the current Minister of External Affairs of India.

163. (d); Smt. Nirmala Sitharaman is the current Finance Minister.

164. (b); Shri Narendra Singh Tomaris a leader of Bharatiya Janata Party and Minister of Rural Development, Minister of Panchayati Raj,

165. (b); Nitin Jayram Gadkari is an Indian politician and the current Minister for Road Transport and Highways and Shipping and is the Member of the Indian Parliament for Nagpur.

166. (e); Shri Raj Nath Singh is an Indian politician currently serving as the Defence Minister of India.

167. (e); Piyush Goyal is an Indian politician. He is currently serving as the Minister of Railways and Coal in the Government of India.

168. (a); Rao Inderjit Singh is an Indian politician and is currently the Minister of Statistics and Programme Implementation in the Government of India.

169. (c); Shri Gajendra Singh Shekhawat is an Indian politician and Cabinet Minister for Drinking Water & Sanitation in the Union Government of India.

170. (c); Ram Vilas Paswan is an Indian politician, from Bihar and the current Minister of Consumer Affairs, Food and Public Distribution.

171. (b); Shri Nitin Jairam Gadkari is an Indian politician and the current Minister of State for Micro, Small and Medium Enterprises in the Government of India.

172. (c); Smt. Smriti Zubin Irani is the Indian Union Cabinet Minister for Women & Child Development.

173. (c);

174. (c); Ravi Shankar Prasad is an Indian lawyer, politician and the current Union Minister holding Law and Justice and Ministry of Information Technology (India) portfolio in the Government of India.

175. (b); **DR. HARSH VARDHAN** is an Indian politician. He is currently the Union Minister of Health and Family Welfare.

176. (b); Shri Hardeep S Puri is an Indian politician and the Union Minister for Civil Aviation in the Narendra Modi Government.

177. (b); Prakash Javadekar is an Indian politician and is the current minister of Ministry of Heavy Industries & Public Enterprises

178. (b); Harsimrat Kaur Badal is the Union Cabinet Minister of Food Processing in the Government of India and member of parliament from Bathinda. She is a member of Shiromani Akali Dal.

179. (e);

180. (a); Shri Dharmendra Pradhan is a senior Indian political leader. He is currently serving as the Union Minister of Steel.

181. (d); Shri Arjun Munda is a member of the Bharatiya Janata Party (BJP) and current Trible Minister of India.

182. (c); Shri Narendra Singh Tomar is an Indian politician having affiliations with Bharatiya Janata Party (BJP) and currently holds the portfolio of Minister of Agriculture of India. He represents Purvi Champaran constituency in Bihar state.

183. (c); Shri Thaawar Chand Gehlot is an Indian politician who currently serves as the Minister of Social Justice and Empowerment in the Modi ministry.

184. (d); Smriti Zubin Irani is an Indian politician and is a Member of Parliament.

185. (a); Dr. Harsh Vardhan is the incumbent minister at Ministry of Science & Technology (India).

186. (b); **The British Academy of Film and Television Arts or BAFTA Film Awards are presented in an annual award show hosted by the British Academy of Film and Television Arts (BAFTA) to honour the best British and international contributions to film.**

187. (a); **Shri Prakash Javadekar is the current Minister of Information and Broadcasting**

188. (c); Department of Industrial Policy and Promotion (DIPP) is working under the Ministry of Commerce and Industry, Government of India. This department is responsible for formulation and implementation of promotional and developmental measures for growth of the industrial sector, keeping in view the national priorities and socio-economic objectives.

189. (b); Stockholm is the capital of Sweden. Its Currency is Swedish krona.

190. (d); Bestselling writer Amish who has entertained readers with his mythological series on Lord Shiva and Lord Rama, has announced his entry into the non-fiction genre, with his new book, "Immortal India".

191. (d); Balijatra festival is held in Odisha, in the city of Cuttack at Gadagadia Ghata of the Mahanadi river.

192. (c); The book, 'President's Lady' (Pranaber Preyosi), was released by vice president Hamid Ansari during a function at Rashtrapati Bhavan on a day that marked the President's wedding anniversary. The book has been written by Sangeeta Ghosh

193. (a); The World Bank is like a cooperative, made up of 189 member countries. These member countries, or shareholders, are represented by a Board of Governors, who are the ultimate policymakers at the World Bank.

194. (a); The book titled "The Shershah of Kargil" is a biography of Kargil war hero Late Captain Vikram Batra, who was posthumously awarded Param veer Chakra (PVC) – the highest gallantry award of India. The book written by Deepak Surana is an inspiring story of the young captain Vikram Batra, which takes you through the various dimensions of Captain Batra's life.

195. (e); Shri Ravindra Narayana Ravi is the current governor of Meghalaya.

196. (b); Actress Deepika Padukone launched Hema Malini's biography 'Hema Malini: Beyond the Dream Girl' on the occasion of Hema's 69th birthday. The biography has been penned by journalist turned writer Ram Kamal Mukherjee.

197. (a); The book titled "Dreamnation: Uniting a Country with Handwritten Dreams" has been co-authored by Saji Mathew and Jubie John and is published by Bloomsbury.

198. (d); Shri Ramesh Bais is current governor of Tripura.

199. (c); Y Sanathoi Devi is associated with Wushu sports

200. (b); The largest producer of onion in India is Maharashtra.

201. (c); **202. (b);** **203. (a);**

204. (e); **205. (c);** **206. (b);**

207. (d); **208. (c);** **209. (b);**

210. (e); **211. (d);** **212. (b);**

213. (b); **214. (e);** **215. (b);**

216. (c); **217. (c);** **218. (c);**

219. (c); **220. (b);** **221. (b);**

222. (b); **223. (d);** **224. (c);**

225. (e); **226. (a);** **227. (d);**

228. (b); **229. (a);** **230. (c);**

231. (e); **232. (d);** **233. (d);**

234. (c); **235. (e);** **236. (b);**

237. (d); **238. (c);** **239. (c);**

240. (e); **241. (a);** **242. (c);**

243. (b); **244. (c);** **245. (c);**

246. (a); **247. (d);** **248. (d);**

249. (b); **250. (b);** **251. (b);**

252. (c); **253. (c);** **254. (c);**

255. (d); **256. (e);** **257. (b);**

258. (e); **259. (b);** **260. (b);**

261. (b); **262. (c);** **263. (b);**

264. (d); **265. (a);** **266. (c);**

267. (d); **268. (b);** **269. (a);**

270. (b); **271. (b);** **272. (c);**

273. (d); **274. (b);** **275. (b);**

276. (d); **277. (c);** **278. (b);**

279. (d); **280. (a);** **281. (d);**

282. (c); **283. (a);** **284. (c);**

285. (b); **286. (b);** **287. (d);**

288. (a); **289. (c);** **290. (c);**

291. (d); **292. (a);** **293. (c);**

294. (b); **295. (d);** **296. (c);**

297. (b); **298. (c);** **299. (c);**

300. (d);